SONY

3-291-227-13(1)

MOD:
KDL-37N4000
SER NO.

LCD Digital Color TV

Operating Instructions

KDL-32N4000
KDL-37N4000

BRAVIA

© 2008 Sony Corporation

Owner's Record

The model and serial numbers are located at the rear of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this TV.

Model Name

_____

Serial No.

_____

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Declaration of Conformity

Trade Name: SONY
Model: KDL-32N4000/KDL-37N4000
Responsible Party: Sony Electronics Inc.
Address: 16530 Via Esprillo
San Diego, CA 92127 U.S.A.
Telephone Number: 858-942-2230

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ☐ Reorient or relocate the receiving antenna.
- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ☐ Consult the dealer or an experienced radio/TV technician for help.

Pursuant to FCC regulations, you are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Safety

- ☐ Operate the TV only on 120 V AC.
- ☐ Use the AC power cord specified by Sony and suitable for the voltage where you use it.
- ☐ The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- ☐ If any liquid or solid object should fall inside the cabinet, unplug the TV immediately and have it checked by qualified service personnel before operating it further.
- ☐ If you will not be using the TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.
- ☐ When disconnecting AC power cord, the power cord should be easily accessible for disconnection.
- ☐ The apparatus must not be exposed to dripping or splashing. Do not place objects filled with liquids, such as vases on the apparatus.
- ☐ For details concerning safety precautions, see "Safety and Regulatory Booklet" (included).

Installing

- ☐ The TV should be installed near an easily accessible power outlet.
- ☐ To prevent internal heat buildup, do not block the ventilation openings.
- ☐ Do not install the TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- ☐ Avoid operating the TV at temperatures below 41°F (5°C).
- ☐ If the TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color due to moisture condensation. In this case, please wait a few hours to let the moisture evaporate before turning on the TV.
- ☐ To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the TV in a room where the floor and walls are not of a reflective material.

CAUTION

Use the following Sony TVs only with the following WALL-MOUNT BRACKET.

	Sony TV Model No.
	KDL-32N4000 KDL-37N4000
Sony Wall-Mount Bracket Model No.	SU-WL500

Use with other WALL-MOUNT BRACKET may cause instability and possibly result in injury (see page 7).

To Customers

Sufficient expertise is required for installing the specified TV. Be sure to subcontract the installation to Sony dealer or licensed contractors and pay adequate attention to safety during the installation.

Note

This television includes a QAM demodulator which should allow you to receive unscrambled digital cable television programming via subscription service to a cable service provider. Availability of digital cable television programming in your area depends on the type of programming and signal provided by your cable service provider.

For Customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

For Customers in the United States

Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance (www.eiae.org).

Trademark Information

Macintosh is a trademark licensed to Apple, Inc., registered in the U.S.A. and other countries.

Manufactured under license from Dolby Laboratories.
Dolby, Pro Logic, and the double-D symbol are registered trademarks of Dolby Laboratories.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

Fergason Patent Properties, LLC:
U.S. Patent No. 5, 717, 422
U.S. Patent No. 6, 816, 141

Blu-ray is a trademark.

"BRAVIA" and BRAVIA, ■, BRAVIA Theatre Sync and DMPORT are trademarks or registered marks of Sony Corporation.

"PLAYSTATION" is a registered trademark and "PS3" is a trademark of Sony Computer Entertainment Inc.

Contents

Welcome to the World of BRAVIA®

The Four Steps to Stunning HD Experience: Set, Sound, Source, and Setup 4

Picture Quality and Aspect Ratio 4

Getting Started

1. Installing the TV 5

How to Carry the TV 5

How to Attach the Subwoofer 5

Securing the TV 6

Bundling the Connecting Cables 7

Preparation for Wall-Mounting 7

Installing the Wall-Mount Bracket 9

When Installing the TV Against a Wall or Enclosed Area 10

2. Locating the Inputs and Outputs 11

Side Panel 11

Rear Panel 12

3. Connecting the TV 14

5.1 Surround Sound System 14

Recommended Position for the Satellite Speakers 18

Cable System and/or VHF/UHF 19

HD Cable Box/HD Satellite Box 19

PC 21

Other Equipment 22

4. Setting Up the Channel List - Initial Setup 23

Exploring Fun Features

Using BRAVIA Theatre Sync™ with Control for HDMI 24

Using DIGITAL MEDIA PORT adapter 24

Remote Control and TV Controls/Indicators

Inserting Batteries 25

When Using the Remote Control 25

Remote Control 26

TV Controls/Indicators 30

Using TV Menus

Navigating through TV Menus 31

Menu Descriptions 31

Using the Shortcuts Menu 32

Using the Picture Menu 34

Using the Sound Menu 34

Using the Screen Menu 36

Using the Channel Menu 37

Using the Parental Lock 38

Using the Setup Menu 41

Other Information

Troubleshooting 43

Specifications 46

Index 47

Quick Setup Guide (separate volume)
Provides a variety of optional equipment connection diagrams.

Customer Support
http://www.sony.com/tvsupport

On-line Registration
United States
http://productregistration.sony.com
Canada
http://www.sonystyle.ca/registration

Welcome to the World of BRAVIA®

Thank you for purchasing this Sony BRAVIA® high-definition television. The quality of the image you see on your **BRAVIA** TV is only as good as the quality of the signal it receives. To experience the stunning detail of your new **BRAVIA** TV, you need access to HD programming. Your **BRAVIA** TV can receive and display HD programming from:

- Over-the-air broadcasting via HD-quality antenna
- HD cable subscription
- HD satellite subscription
- Blu-ray Disc™ player or other external equipment

Contact your cable or satellite provider for information on upgrading to HD programming.

To learn more about HDTV, visit:
U.S.A http://www.sony.com/HDTV
Canada http://www.sonystyle.ca/hd

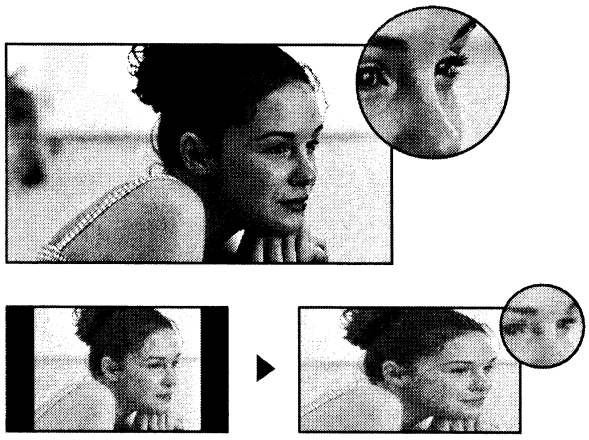
The Four Steps to Stunning HD Experience: Set, Sound, Source, and Setup

Along with your **BRAVIA** TV **set**, a complete HD system requires an HD **sound** system, a **source** of HD programming and proper **setup** connections. This manual explains basic setup connections (see page 14). The Quick Setup Guide, enclosed separately, illustrates how to connect other optional equipment.

Picture Quality and Aspect Ratio

You can enjoy crisp, clear images, smooth movement and high-impact visuals from 1080i HD signals. When you compare a high-definition signal to a standard analog signal, you will notice a big difference. The 1080i HD signals provide more than twice the vertical resolution of the standard TV signal.

High-definition and standard-definition signals are transmitted with different aspect ratios (the width-to-height ratio of the image). HDTV uses a wider screen than conventional standard-definition TV.



16:9 (high-definition) source

Most HDTV signals use a wide screen aspect ratio of 16:9. The 16:9 fills your **BRAVIA** screen, maintaining a crisp, clear, vivid picture.

4:3 (standard-definition) source

Most standard-definition signals use a boxy 4:3 aspect ratio. When a 4:3 image is displayed on an HDTV, you will see black bars on the sides. The picture quality may not be as sharp as with HD sources.

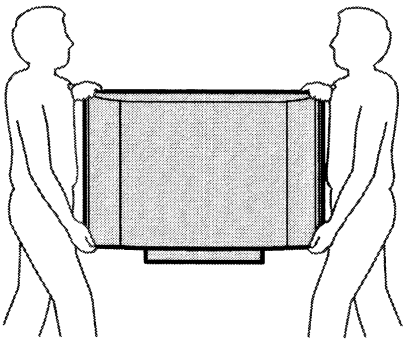
- You can use the **Wide Mode** function of the TV to adjust the 4:3 image to fit the entire screen (see pages 28 and 36).
- This TV supports signals up to 1080i.

1. Installing the TV

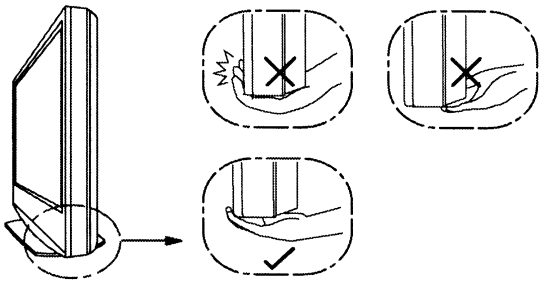
How to Carry the TV

Be sure to follow these guidelines to protect your properties and avoid causing serious injury.

- Before carrying the TV, disconnect all cables.
- Carrying the large size TV requires two or more people.
- When you carry the TV, place your hand as illustrated and hold it securely. Do not put stress on the LCD panel.
- When carrying the TV, do not subject it to shocks, vibration or excessive force.



- Place your palm directly underneath but do not squeeze the panel's speaker grill area.



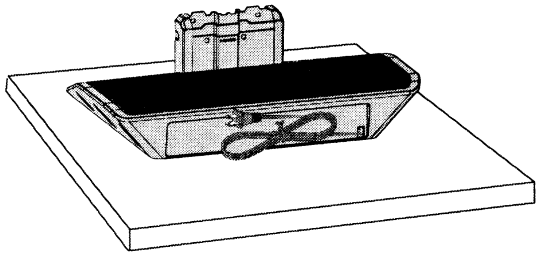
The Subwoofer for this product is packaged separately.
Complete the following instructions to install the TV to the Subwoofer before the connection and setup.

How to Attach the Subwoofer

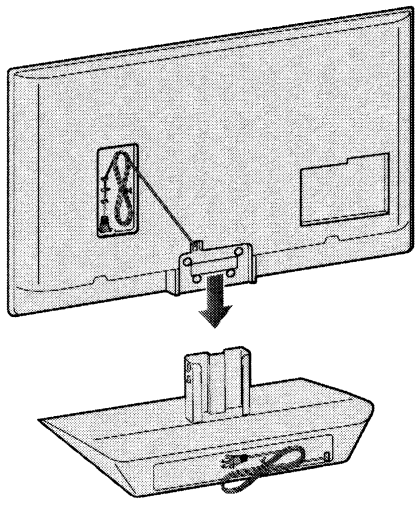
1 Take out the Subwoofer from the cushion and the 4 screws from the accessory bag.

- You will find the Subwoofer next to the TV unit.
- Keep the screws away from children.

2 Place the Subwoofer onto a level and stable surface.



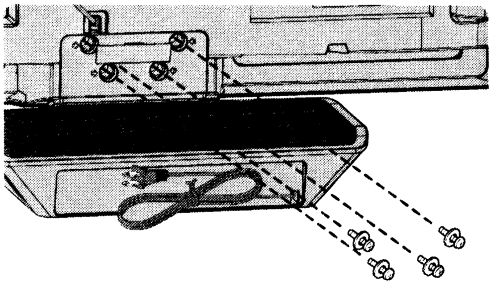
3 Install the TV unit to the Subwoofer by aligning the end of the concave section of the TV unit to the metal neck of the Subwoofer.



(Continued)

- Carrying the TV requires at least two people. When you carry the TV unit, place your hands as illustrated on page 5 and hold it securely. Do not put stress on the LCD panel and the frame around the screen.
- Be careful to not pinch your fingers or the AC power cord when you install the TV unit to the Subwoofer.

4 Stabilize the TV unit and the Subwoofer with the supplied 4 screws.



- If you use an electric screwdriver, set the torque for tightening at approximately 1.5 N·m {15Kgf·cm}.

Securing the TV

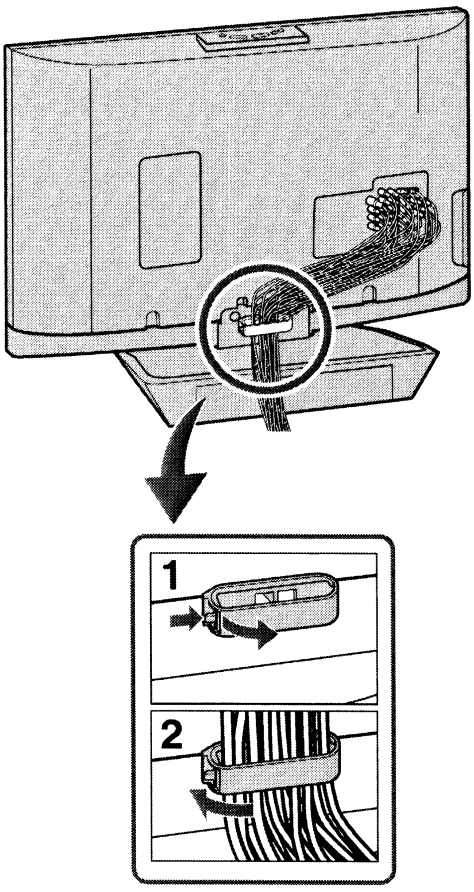
Sony strongly recommends taking measures to prevent the TV from toppling over; as unsecured TVs may topple and result in property damage, serious bodily injury or even death.

Prevent the TV from Toppling

- ☐ Secure the TV to a wall and/or stand.
- ☐ Do not allow children to play or climb on furniture and TV sets.
- ☐ Avoid placing or hanging items on the TV.
- ☐ Never install the TV on:
  - slippery, unstable and/or uneven surfaces.
  - furniture that can easily be used as steps, such as a chest of drawers.
- ☐ Install the TV where it cannot be pulled, pushed, or knocked over.
- ☐ Route all AC power cords and connecting cables so that they are not accessible to children.

Bundling the Connecting Cables

You can bundle the connecting cables as illustrated below.



- Do not bundle the AC power cord with other connecting cables.

Preparation for Wall-Mounting

This TV can be installed on a wall by using a Wall-Mount Bracket (sold separately). Before mounting the TV on a wall, the Subwoofer must be removed from the TV.

- Do not remove the Subwoofer for any reason other than to wall-mount the TV.
- **For product protection and safety reasons, Sony strongly recommends that you use the Wall-Mount Bracket model designed for your TV and the wall-mounting of your TV should be performed by a Sony dealer or licensed contractor.**

Use your TV with the following WALL-MOUNT BRACKET only.

	Sony TV Model No.
	KDL-32N4000 KDL-37N4000
Sony Wall-Mount Bracket Model No.	SU-WL500

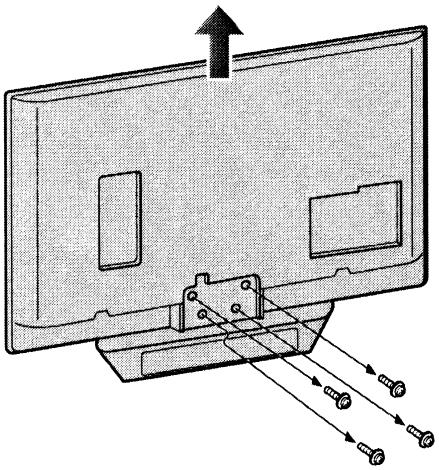
- For bracket installation, refer to the instructions on page 9 and the instruction guide provided by the Wall-Mount Bracket model for your TV. Sufficient expertise is required in installing this TV, especially to determine the strength of the wall for withstanding the TV's weight.
- Be sure to store the removed screws and the Subwoofer in a safe place until you are ready to reattach the Subwoofer. **Keep the screws away from children.**

(Continued)

Follow the simple steps below to remove the Subwoofer:

1 Disconnect all the cables from the TV.

2 Remove the 4 screws from behind the TV as indicated below. **Do not remove any other screws from the TV.**



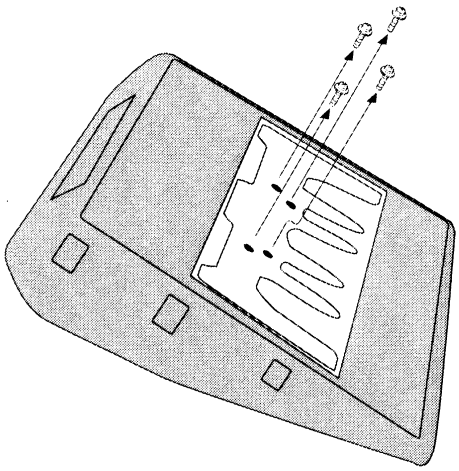
3 Gently lay the TV (face down) onto a level and stable surface covered with a thick and soft cloth.

4 Secure the Mounting Hooks to the rear of the TV. See page 9 for more details on **Installing the Wall-Mount Bracket** and also the **Instruction Guide** provided by the Wall-Mount Bracket model for your TV.

- **If an electric screwdriver is used, set the torque to tighten at approximately 1.5 N·m {15Kgf·cm}.**

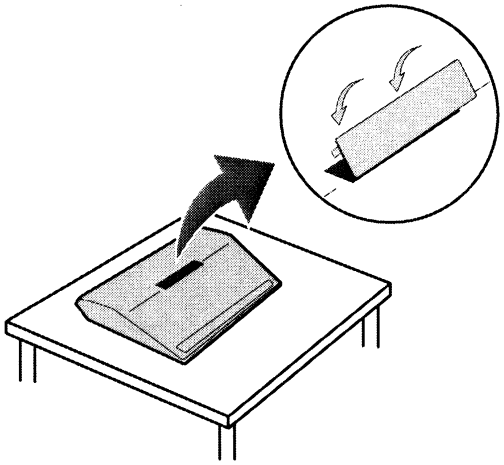
If you decide to mount the TV on a wall, follow the steps below to uninstall the metal neck from the Subwoofer to improve its cosmetic appearance.

1 Gently lay the Subwoofer (face down) to remove the 4 screws of the metal neck.



2 Place the neck cover (supplied) into the Subwoofer to cover the metal neck hole.

- The Subwoofer should not be installed on the wall.



Installing the Wall-Mount Bracket

To Customers

Your KDL-32N4000/37N4000 can be wall-mounted using SU-WL500 Wall-Mount Bracket (sold separately).

For product protection and safety, Sony strongly recommends that you use the Wall-Mount Bracket designed for your TV and wall-mounting is performed by a Sony dealer or a licensed contractor. Do not attempt to install it yourself. Sony is not liable for any damage or injury caused by mishandling or improper installation.

Please provide this installation information as well as the instruction supplied with SU-WL500 Wall-Mount Bracket to your installer.

To Sony Dealers and Licensed Contractors

To avoid injury and property damage, read these instructions carefully. Periodic inspection and maintenance is highly recommended to ensure that TV is securely mounted.

Installing the Wall-Mount Bracket and Mounting Hooks

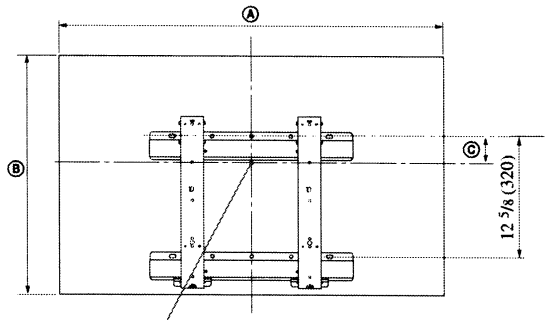
1 Open Wall-Mount package and check for all the required parts including the instruction.

2 See Installation dimensions table to determine the best location for wall-mounting. The wall must be strong enough to support at least four times the weight of the TV. Also refer to the instruction for SU-WL500.

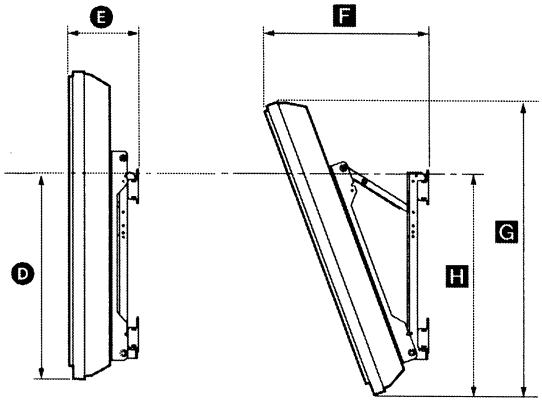
Installation dimensions table

Unit: inches (mm)	TV Dimensions		Screen center dimensions	Length for each mounting angle					Weight	
				Angle (0°)		Angle (20°)				
TV Model	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	TV	×4
KDL-32N4000	36 (912)	21 1/2 (543)	6 5/8 (168)	18 1/2 (467)	6 3/8 (160)	12 1/4 (309)	20 1/8 (509)	20 (505)	29 lb. (13.0 kg)	115 lb. (52.0 kg)
KDL-37N4000	40 1/2 (1,028)	24 (608)	5 1/2 (139)	18 1/2 (467)	6 7/8 (172)	13 1/2 (342)	22 1/2 (570)	20 1/8 (509)	38 lb. (17.0 kg)	150 lb. (68.0 kg)

- Installation dimensions may differ according to how the TV is installed.
- The wall must be strong enough to support at least four times the weight of the TV that you are installing.



Center line of the screen when installed on the wall



3 Install the Base Bracket on the wall. Refer to the instruction for SU-WL500.

4 Disconnect all cables and remove the Subwoofer. See page 7 for details.

5 Install Mounting Hooks on the TV. See diagrams and table for Screw and Hook locations.

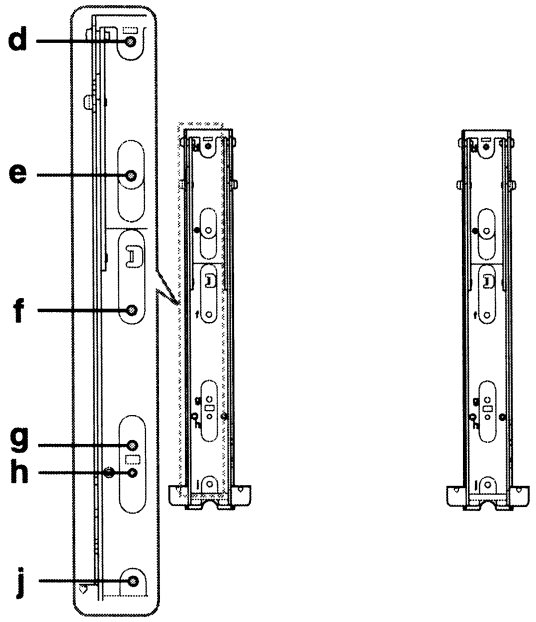
(Continued)

Screw and Hook locations diagram/table

TV Model	Screw location	Hook location
KDL-32N4000	e, g	c
KDL-37N4000	d, g	b

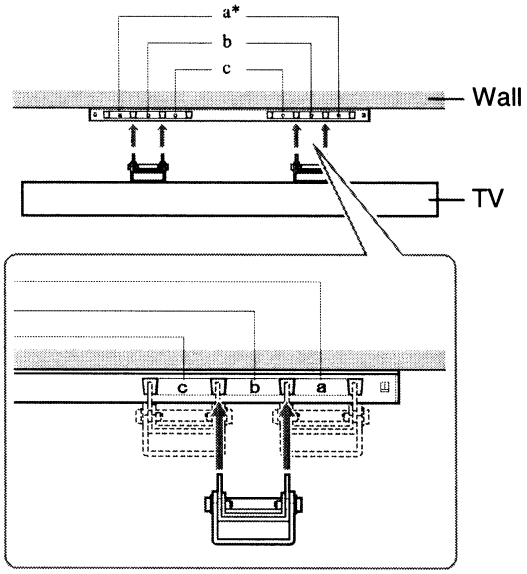
Screw location

When installing the Mounting Hooks on the TV.



Hook location

When installing the TV onto Base Bracket.

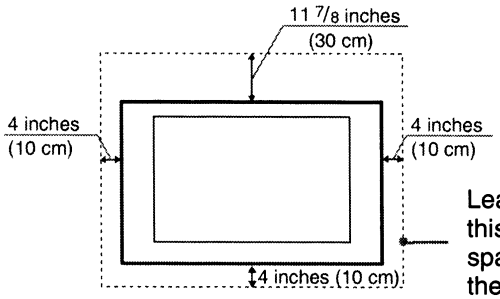


* Hook position "a" cannot be used for the models in the table above.

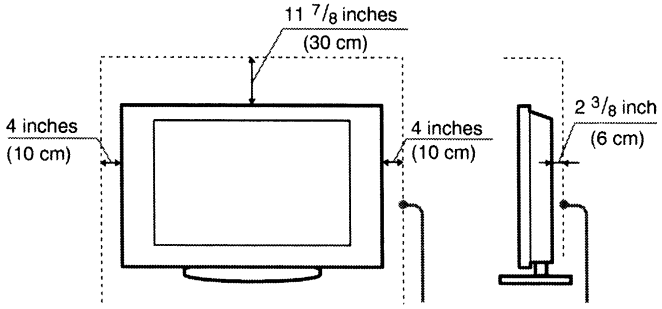
When Installing the TV Against a Wall or Enclosed Area

Make sure that your TV has adequate air circulation. Allow enough space around the TV as shown below.

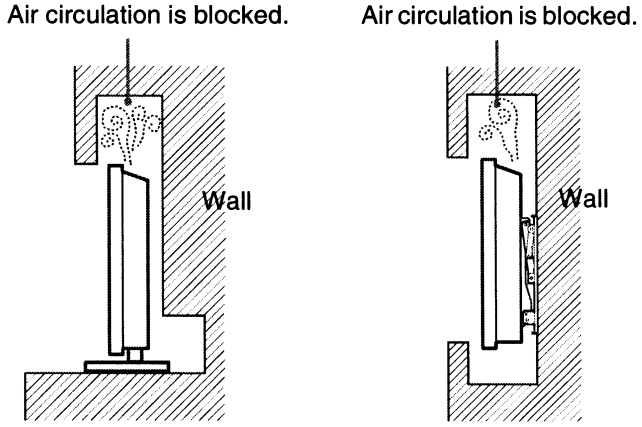
Installed on the wall



Installed with the Subwoofer



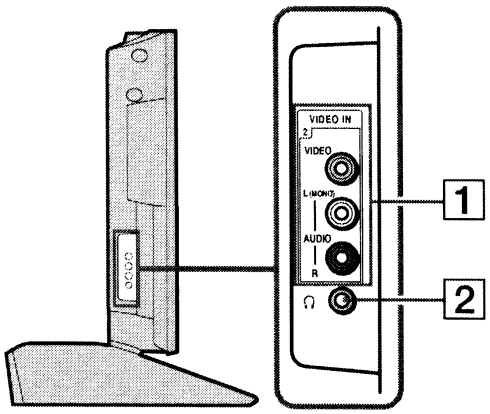
Never install the TV set as follows:



• Inadequate air circulation can lead to overheating of the TV and may cause damage to your TV or cause fire.

2. Locating the Inputs and Outputs

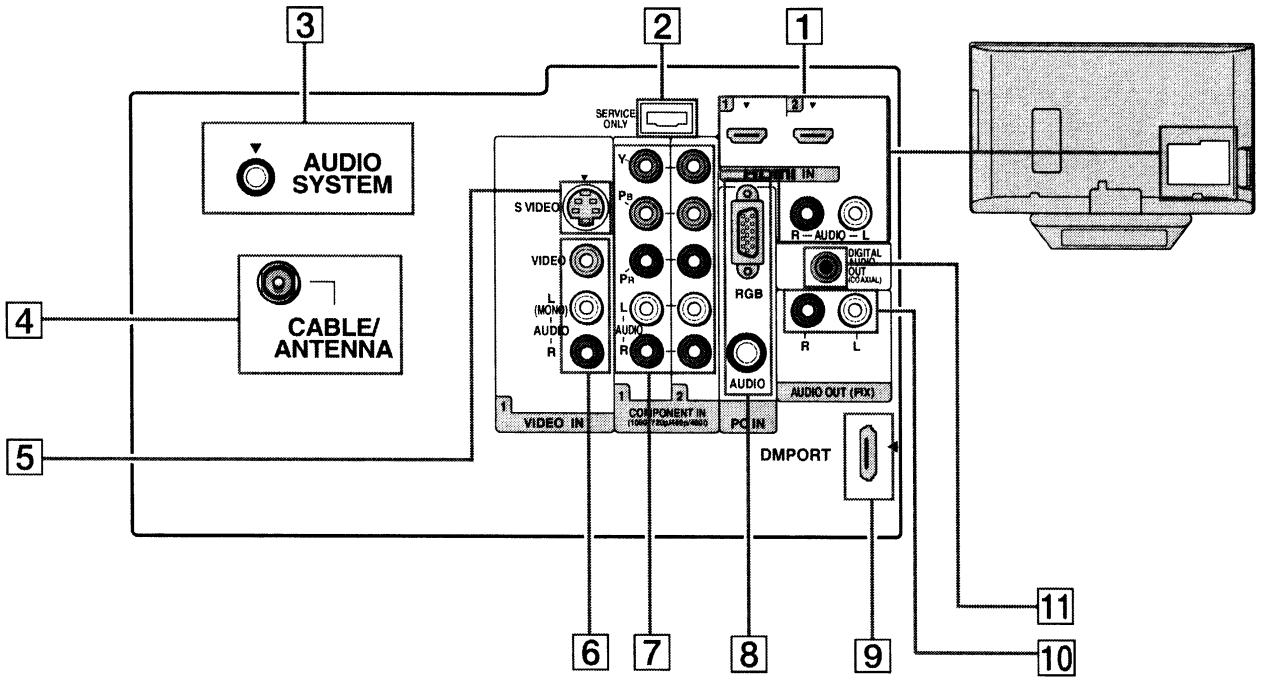
Side Panel



Item		Description
1	**VIDEO IN 2 VIDEO/ L (MONO) - AUDIO-R**	Connects to the composite video and audio output jacks on your camcorder or other video equipment such as a DVD or video game equipment. • If you have mono equipment, connect its audio output jack to the TV's L (MONO) audio input jack.
2	**Headphone jack**	Connects to your headphones. If your headphones do not match the jack, use a suitable plug adapter (not supplied). • While headphones are connected, the TV speakers are muted.

(Continued)

Rear Panel



Item	Description
1 **HDMI IN 1/2 R-AUDIO-L**	HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped audio/video equipment, such as DVD player, a set-top box, A/V receiver and Blu-ray Disc player as well as PC. HDMI supports enhanced or high-definition video plus digital audio. • If the equipment has a DVI and not a HDMI connector, use a DVI to HDMI cable or adapter to connect the DVI output to either HDMI IN 1 or HDMI IN 2 input, and connect the audio jacks to the AUDIO (L/R) jacks below the HDMI IN 2. (DVI connector is for video signals only, the Audio jacks provide support for the audio.) DVI-to-HDMI cable DVI-to-HDMI adapter Audio cable • For better PC view, use the PC IN (RGB IN) input. • HDMI connection is necessary to view 480i, 480p, 720p, and 1080i formats. Note that this TV displays all video input signals in a resolution of 1,366 dots × 768 lines.
2 **SERVICE ONLY**	This USB port is for service only.
3 **AUDIO SYSTEM**	Connects the Subwoofer to the TV. • The Subwoofer should not be connected to another system.
4 **CABLE/ ANTENNA**	RF input that connects to your cable or VHF/UHF antenna.
5 **VIDEO IN 1 S VIDEO**	Connects to the S VIDEO output jack of your DVD or other video equipment that has S VIDEO. S VIDEO provides better picture quality than composite video (6). S VIDEO does not provide sound, you need to connect the audio cables.

Item		Description
6	**VIDEO IN 1 VIDEO/ L(MONO)- AUDIO-R**	Connects to the composite video and audio output jacks on your A/V equipment such as a DVD or other video equipment. A second composite video and audio input (VIDEO IN 2) is located on the left side panel of the TV.
7	**COMPONENT IN 1/2 (1080i/720p/ 480p/480i)/ L-AUDIO-R**	Connects to your DVD player's or digital set-top box's component video (YP_BP_R) and audio (L/R) jacks. Component video provides better picture quality than the S VIDEO (5) or the composite video (6) connections.
8	**PC IN (RGB/AUDIO)**	Connects to a personal computer's video output connector using HD15-HD15 cable (analog RGB, not supplied). See "PC Input Signal Reference Chart" on page 21 for the signals that can be displayed. ✍ • For some Apple Macintosh computers, it may be necessary to use an adapter (not supplied). If this is the case, connect the adapter to the computer before connecting the HD15-HD15 cable.
9	**DMPORT**	Connects to DIGITAL MEDIA PORT adapter (not supplied) to display photos and videos or play music from a Portable Player to your TV (see page 24 for more details). ✍ • Available DIGITAL MEDIA PORT adapters vary in each area. • Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
10	**AUDIO OUT (FIX) R/L**	Connects to the left and right audio input jacks of your audio or video equipment. You can use these outputs to listen to your TV's audio through your stereo system.
11	**DIGITAL AUDIO OUT (COAXIAL)**	Connects to the coaxial audio input of a digital audio equipment that is PCM/Dolby Digital compatible.

✍

• Component video (YP_BP_R) or HDMI connection are necessary to view 480i, 480p, 720p, and 1080i formats. Note that this TV displays all format types of picture in its native resolution of 1,366 dots × 768 lines.

3. Connecting the TV

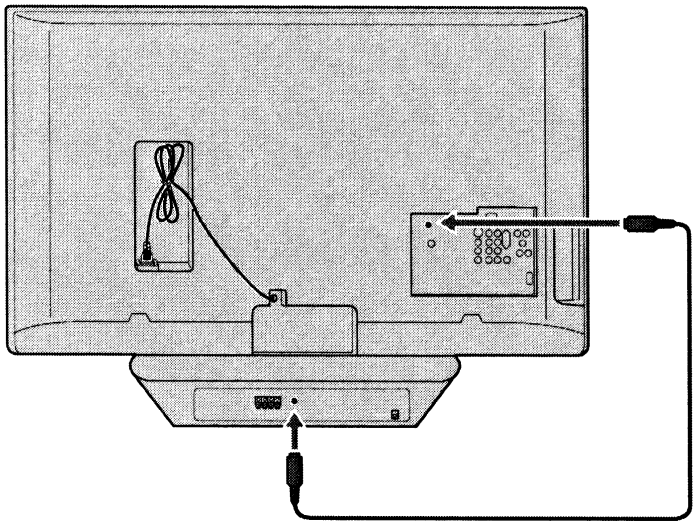
5.1 Surround Sound System

To further enhance the sound quality, connect the Subwoofer and the 2 Satellite Speakers before using the TV.

- Before connecting the Subwoofer, be sure to attach the Subwoofer to the TV (see page 5 for more details).
- Connect the Subwoofer and the Satellite Speakers before connecting the TV to the wall outlet.

Subwoofer connection

1 Using DIN cable (supplied) connect the AUDIO SYSTEM output on the rear of the TV to the AUDIO SYSTEM input on the Subwoofer as shown below.

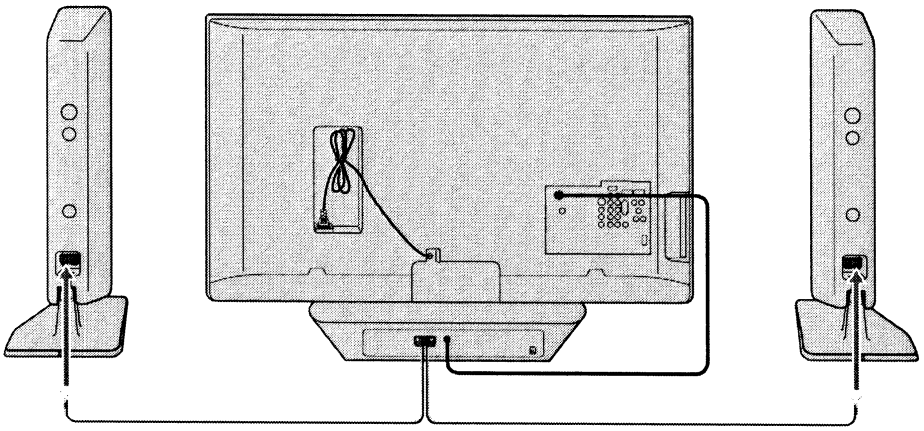


2 Once Subwoofer installation is complete, connect the 2 Satellite Speakers to the Subwoofer.

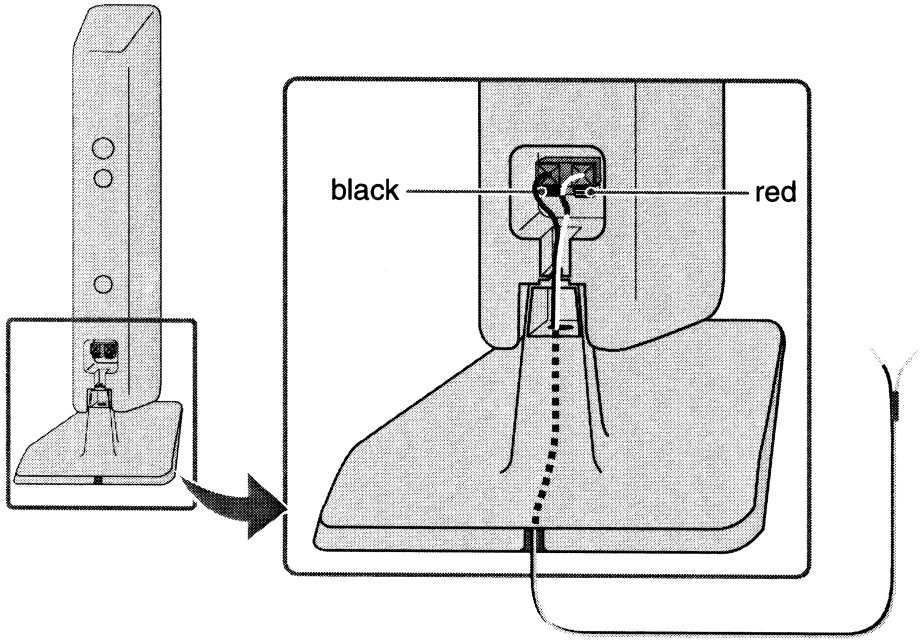
- Only the supplied Subwoofer should be connected to the AUDIO SYSTEM output from the TV; if you connect any other equipment, it could cause a malfunction or damage the TV.
- Do not connect unspecified cable to the TV AUDIO SYSTEM output. Connecting other cables can cause a malfunction or damage the TV.

Satellite Speakers connection

1 Connect the supplied cables to the Satellite Speakers inputs, make sure to connect the black cables to the black jacks ⊟ of the Satellite Speakers, and the white cables (with the red mark) to the corresponding red jacks ⊞.

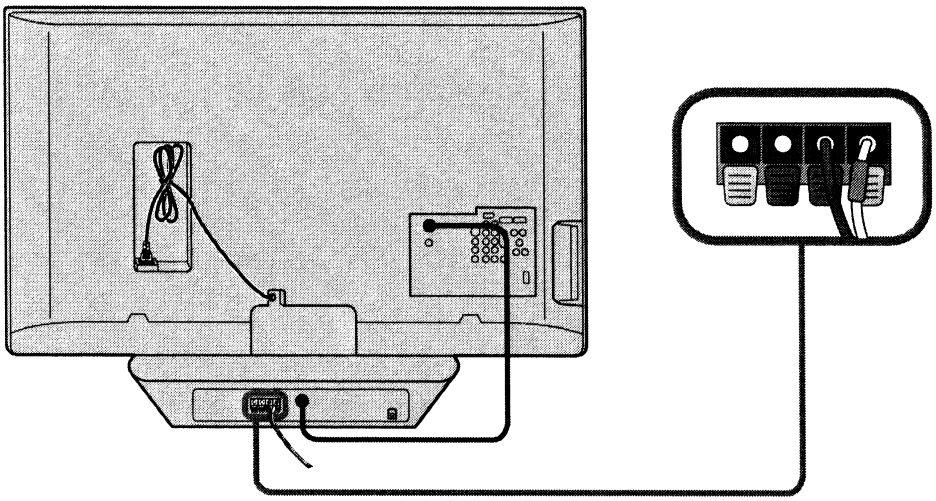


- For a better look, you can hide the cables of the Satellite Speakers by threading them through the rear column (see illustration).

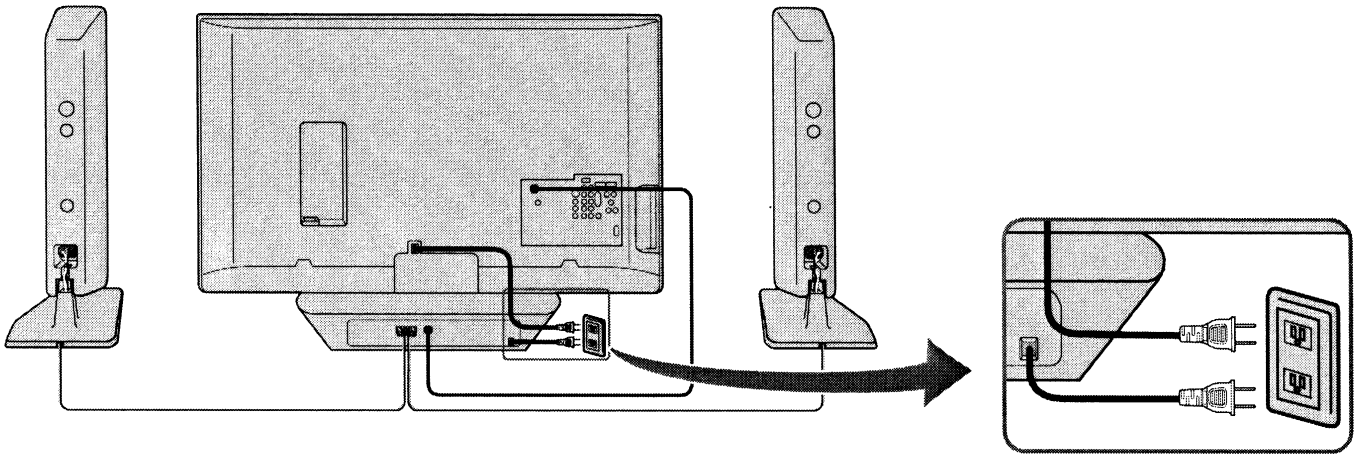


(Continued)

2 Connect the Satellite Speakers cables to the Subwoofer output. Connect white cables (with the red mark) from the Satellite Speakers to the R+ and L+ Subwoofer jacks (red); and black cables from the Satellite Speakers to the R- and L- Subwoofer jacks (black).



3 Once Subwoofer and Satellite Speakers connection is complete, plug the TV's and Subwoofer's AC power cords into the wall outlet.

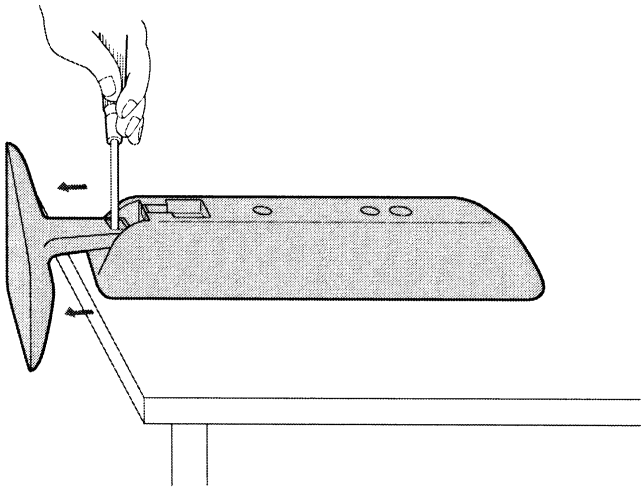


Preparation of Satellite Speakers Wall-Mounting

The Satellite Speakers can be installed on a wall by using a Wall-Mount Bracket (sold separately).

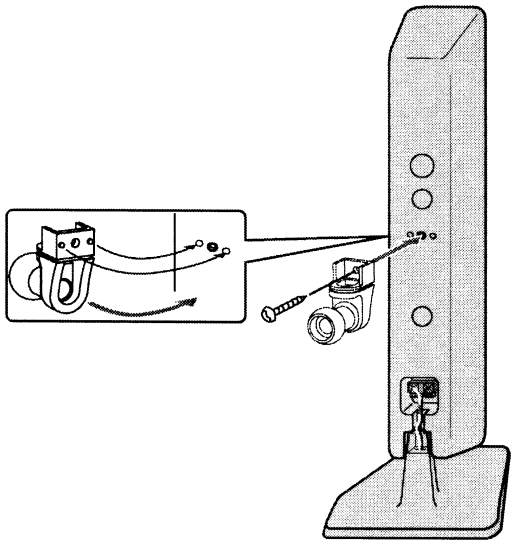
1 Before mounting the Satellite Speakers on a wall, you must remove the stand from the Satellite Speakers.

• Use a screwdriver to remove the Satellite Speakers Stand.



2 To install the Satellite Speakers on a wall, you should use the Wall-Mount Bracket WS-WV10D (sold separately). For this accessory use only the screw that is attached to the Satellite Speakers. Use a screwdriver to remove the screw from the Satellite Speakers.

• If you use an electric screwdriver, set the torque for tightening at approximately 1.5 N·m {15Kgf·cm}.
• Be sure to store the removed screws and the Satellite Speakers Stand in a safe place until you are ready to reattach the stand to the Satellite Speakers. Keep the screws away from children.



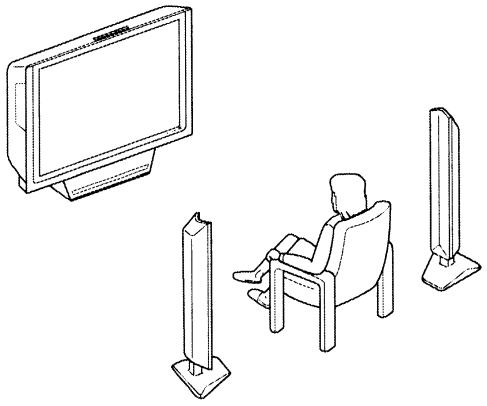
• Do not remove the Satellite Speakers Stand for any reason other than to wall-mount the Satellite Speakers.

(Continued)

Recommended Position for the Satellite Speakers

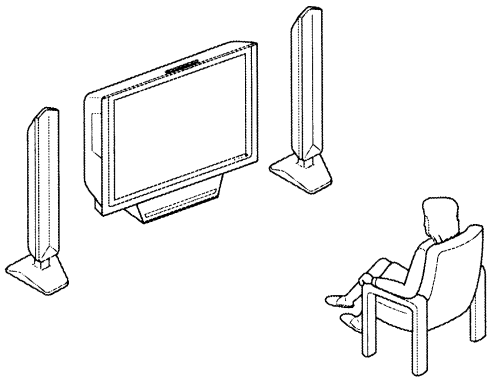
When the Sound effect is Dolby Pro Logic II Movie, Dolby Pro Logic II Music or Dolby Pro Logic II Matrix

It's recommended to place the Satellite Speakers as shown in the illustration below. On these effects the Satellite Speakers replay the Left and the Right Surround Sound, that together with the Left, Central, Right Speakers and Subwoofer replay sound of 5.1 channels.



When the Sound effect is off or Dolby Pro Logic II Virtual mode

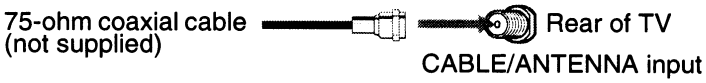
It's recommended to place the Satellite Speakers at both sides of the TV. In this position, the Speakers will play the same sound like the TV lateral speakers, duplicating the power of the sound of the left and right channels.



• See page 35 for more details of Sound effects (**Dolby Pro Logic II Movie**, **Dolby Pro Logic II Music**, **Dolby Pro Logic II Matrix**, **Dolby Pro Logic II Virtual**).

Cable System and/or VHF/UHF

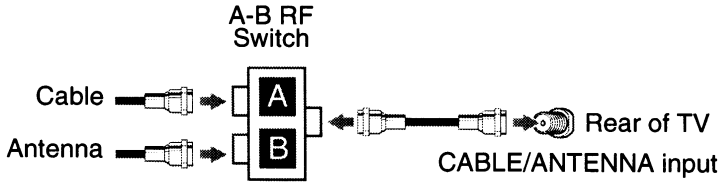
Cable or VHF/UHF (or VHF only)



- It is strongly recommended that you connect the antenna/cable input using a 75-ohm coaxial cable (not supplied) to receive optimum picture quality. A 300-ohm twin lead cable can be easily affected by radio frequency interference, resulting in signal degradation.

Cable and VHF/UHF (or VHF only)

If you want to watch both cable and antenna (over-the-air) programming, you will need to use an optional A-B RF Switch (not supplied) to switch between the cable and over-the-air antenna programming, as shown.

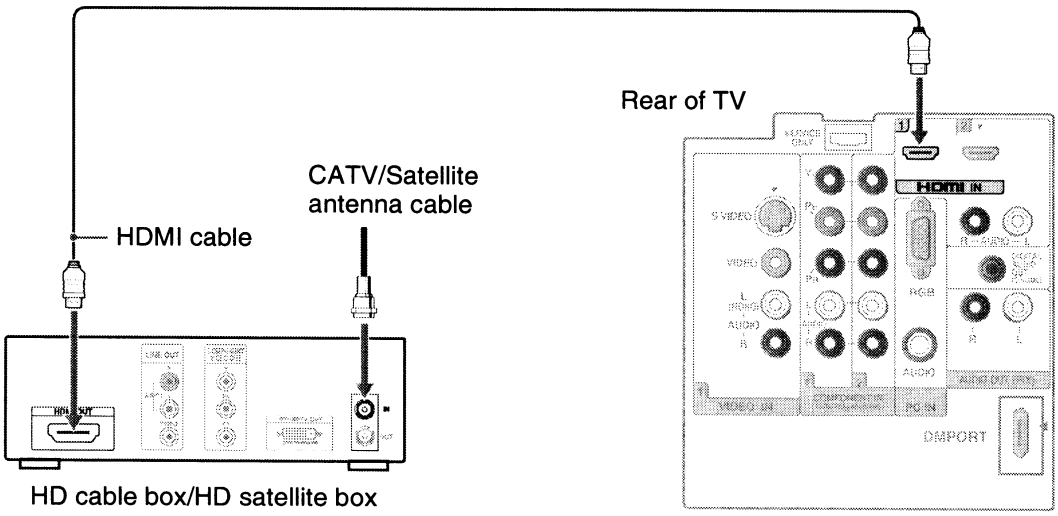


- Be sure to set **Cable** setting to **On** or **Off** in **Channel** menu for the type of input signal you choose (see page 37 for more details).

HD Cable Box/HD Satellite Box

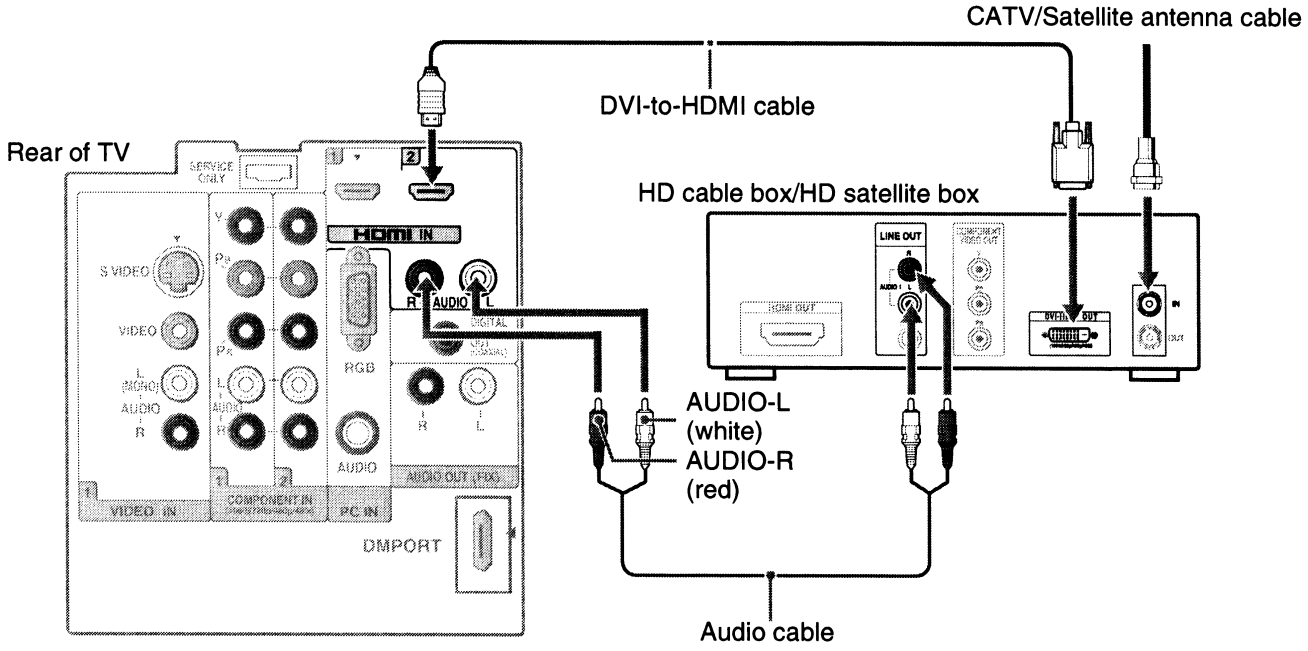
You can also enjoy high-definition programming by subscribing to high-definition cable service or high-definition satellite service. For the best possible picture, connect these components to your TV via the HDMI or component video (with audio) input on the back of your TV.

Shown with HDMI Connection



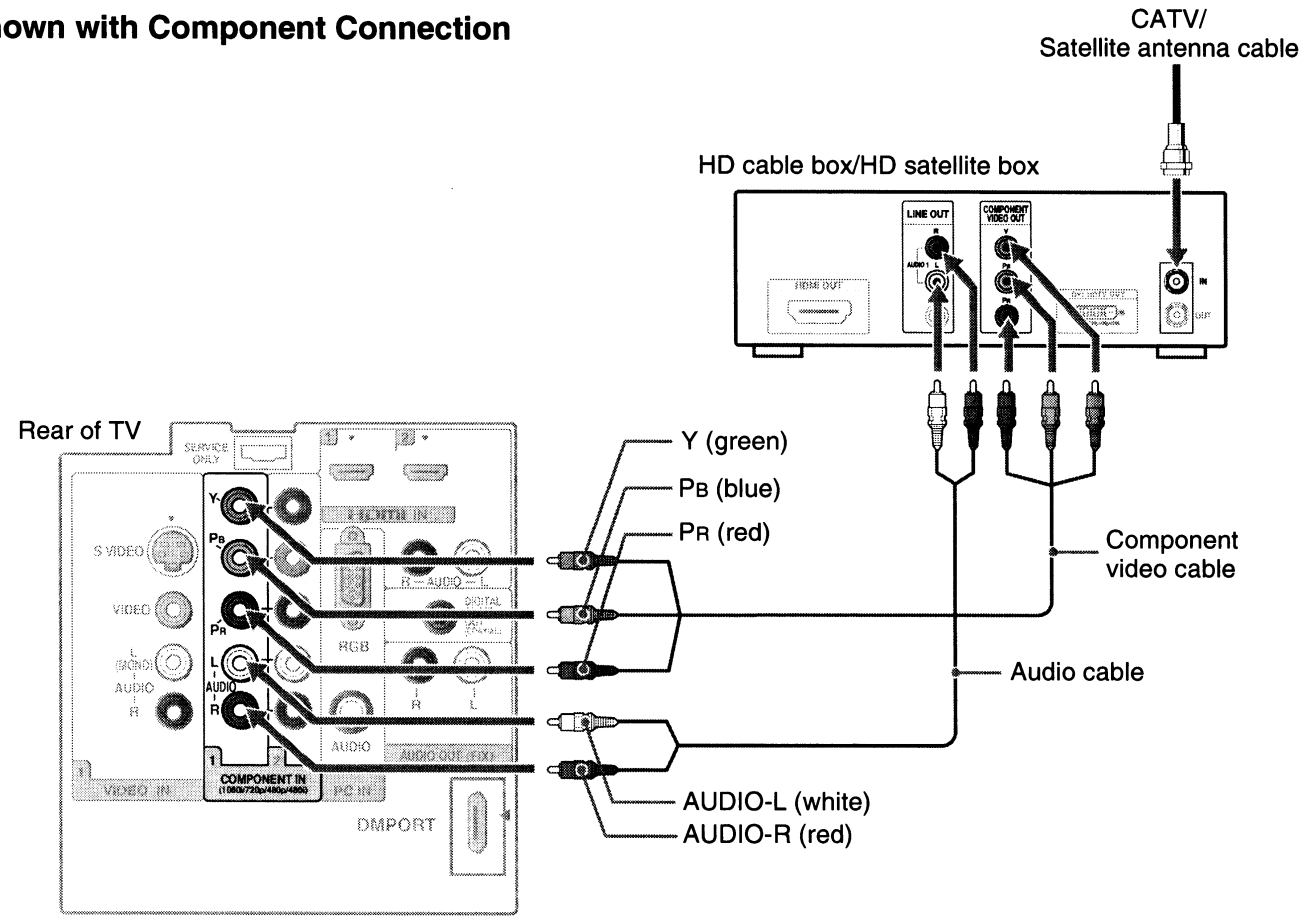
(Continued)

Shown with DVI Connection



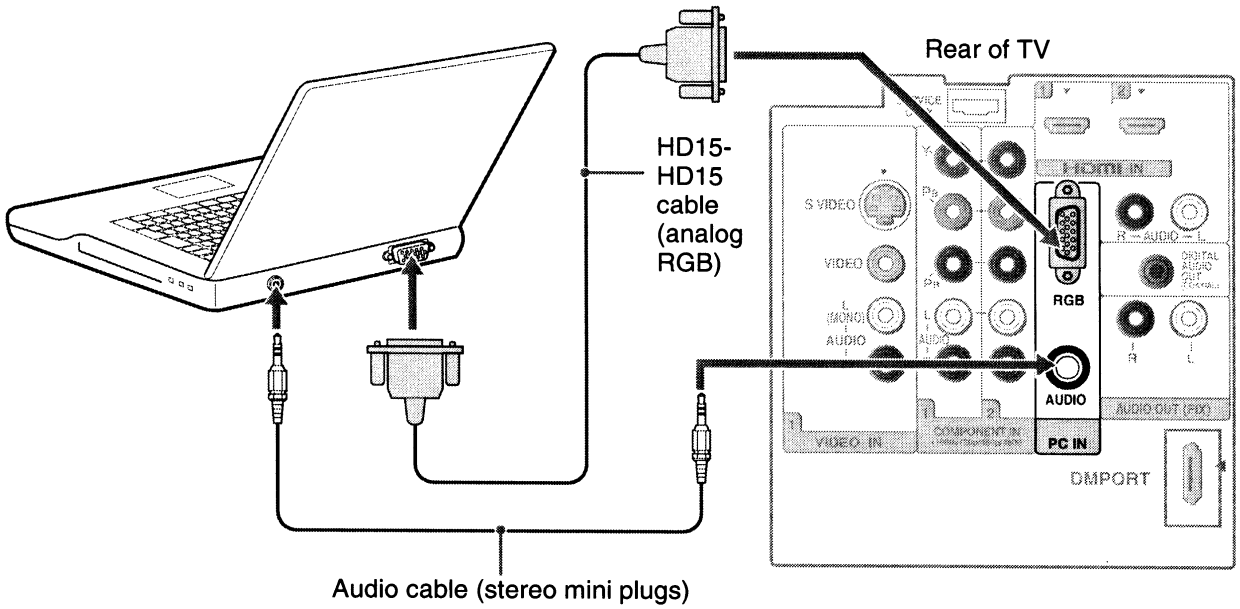
- If the equipment has a DVI and not an HDMI connector, use a DVI-to-HDMI cable or adapter to connect the DVI output to either HDMI IN 1 or HDMI IN 2 input, and connect the audio jacks to the AUDIO (L/R) jacks below the HDMI IN 2 (DVI connector is for video signals only, the audio jacks provide support for the audio).

Shown with Component Connection



PC

Use the TV as a monitor for your PC.
Shown below with the HD15 to HD15 connection. This TV can also be connected to a PC with DVI or HDMI output. (Refer to the supplied Quick Setup Guide.)



- Connect the PC IN jack to the PC using the HD15-HD15 cable with ferrite core (analog RGB) and audio cable (page 13).

PC Input Signal Reference Chart

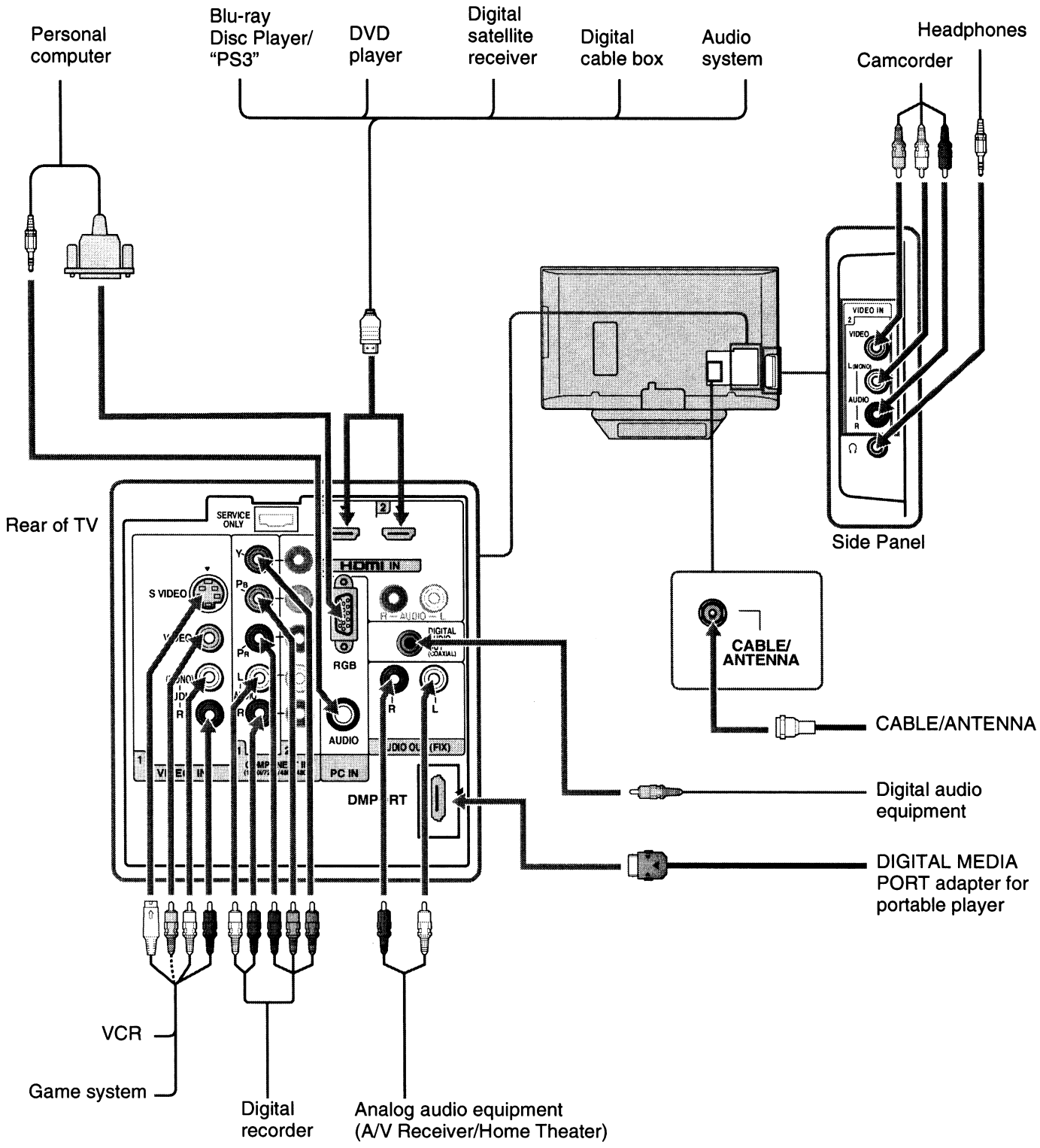
After connecting the PC to the TV, set the output signal from the PC according to the chart below.

Signals	Resolution			Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
	Horizontal (Pixel)	×	Vertical (Line)			
VGA	**640**	×	**480**	**31.5**	**60**	**VGA**
	640	×	480	37.5	75	VESA
SVGA	**800**	×	**600**	**37.9**	**60**	**VESA Guidelines**
	800	×	600	46.9	75	VESA
XGA	**1,024**	×	**768**	**48.4**	**60**	**VESA Guidelines**
	1,024	×	768	56.5	70	VESA
	1,024	×	768	60.0	75	VESA
WXGA	**1,280**	×	**768**	**47.8**	**60**	**VESA**
	1,360	×	**768**	**47.7**	**60**	**VESA**

- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC VGA input does not support interlaced signals.
- For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60 Hz vertical frequency from a personal computer. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)

(Continued)

Other Equipment



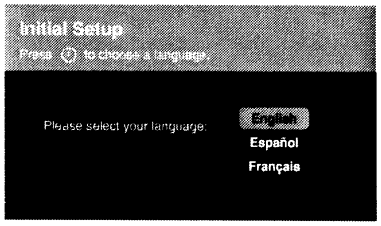
• Refer to the Quick Setup Guide (supplied) when connecting other equipment to your TV.

4. Setting Up the Channel List - Initial Setup

After you finish connecting your TV, you need to run **Initial Setup**, which automatically sets up available channels. The **Initial Setup** screen appears when you turn on your TV for the first time. If you do not want to set up the channels at this time, you can do it later by selecting the **Auto Program** option in the **Channel** menu (see page 37).

1 Press POWER ⏻ to turn on the TV.

The **Initial Setup** screen appears.



2 Press ↑/↓ to highlight the desired language, then press ⊕.

3 Please connect cable or antenna, then select **Yes** to run **Auto Program**.

- If you want to run **Auto Program** later, select **No**.
- If you have both cable and antenna available, please connect cable first.
- **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program some channels may not be available.**

4 Follow the help text provided on the screen to run **Auto Program**. **Auto Program** will scan for available channels from signal source directly connected to the TV's CABLE/ANTENNA input.

5 When **Auto Program** is complete, select **OK** to finish the **Auto Program** process.

To run Auto Program at a later time

❑ Use the **Auto Program** feature at **Channel** menu as described on page 37.

To display the picture in your preferred aspect ratio

❑ Select the proper **Wide Mode** as described on pages 28 and 36.

- You may want to set up convenient features such as **Favorites** (see page 32), **Show/Hide Channels** (see page 37), **Label Channels** (see page 37) when **Auto Program** is completed.

Using BRAVIA Theatre Sync™ with Control for HDMI

This TV is equipped with BRAVIA Theatre Sync™. The **Control for HDMI** function enables BRAVIA Theatre Sync to allow communication between Sony TV's and Sony equipment. Only Sony equipment with **Control for HDMI** capability is supported.

To connect Sony equipment with Control for HDMI

Use an HDMI cable that bears the HDMI logo for connection. See pages 19 to 22 or see the HDMI connection shown in the Quick Setup Guide provided with the TV documentation.

Setting the Control for HDMI

In order for the function of **Control for HDMI** to operate, the TV and other Sony equipment with **Control for HDMI** function must be setup (see page 42). For other equipment, refer to the operating instruction for that equipment.

Control for HDMI available with your TV

The following operations are available after you connect the Sony equipment with **Control for HDMI** function to your TV:

- Automatically turn off the connected equipment when you turn off the TV.
- The TV will automatically turn on and tunes to the respective HDMI input when the connected equipment is turned on by One-Touch-Play.
- Equipment listed under **External Inputs** will turn on automatically when selected.

When you connect a Sony A/V receiver with BRAVIA Theatre Sync function to your TV, the following additional operation is possible:

- By pressing THEATER on the remote control, it turns on and searches for external audio system. When the BRAVIA Theatre Sync audio system is on, the internal speakers of the TV will turn off and the **Picture Mode** will change automatically to **Cinema**.

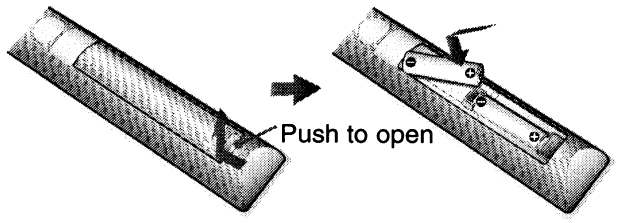
Using DIGITAL MEDIA PORT adapter

Connecting a DIGITAL MEDIA PORT adapter, lets you display photos and videos or play music from a Portable Player to your TV.
The equipment's menu may be displayed on the TV and can be controlled via the TV's remote control. By pressing ↑/↓, ←/→, ⊕ and RETURN you can go through the equipment's menu. Use ↑/↓ (to go up/down), ← (to left), → (to go right or to play), ⊕ (to select an item or to play), and RETURN (to go previous menu window).

- Viewing the equipment's menu on the TV and controlling it via the TV's remote control depends on the equipment; refer to the equipment's operating instructions.
- Available DIGITAL MEDIA PORT adapters vary in each area.
- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
- Depending on the type of DIGITAL MEDIA PORT adapter, images may also be output. In this case, the system outputs only a composite video signal.
- Check compatibility between portable audio and the DIGITAL MEDIA PORT adapter.

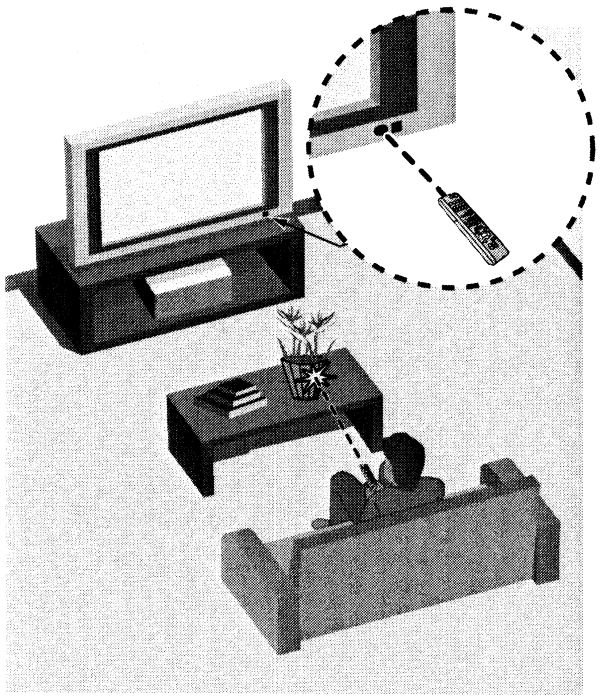
Remote Control and TV Controls/Indicators

Inserting Batteries



Insert two size AA batteries (supplied) by matching ⊕ and ⊖ on the batteries to the diagram inside the battery compartment of the remote control.

When Using the Remote Control



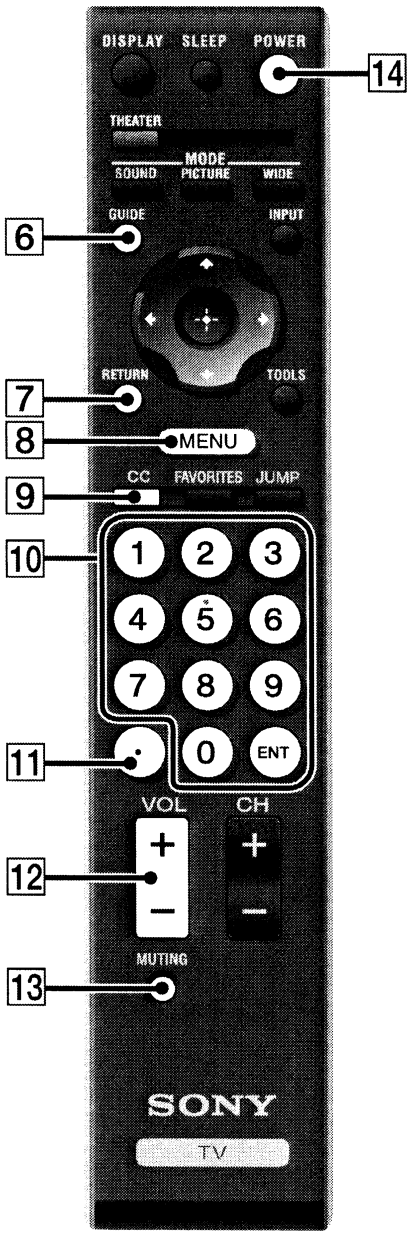
Follow the guidelines below

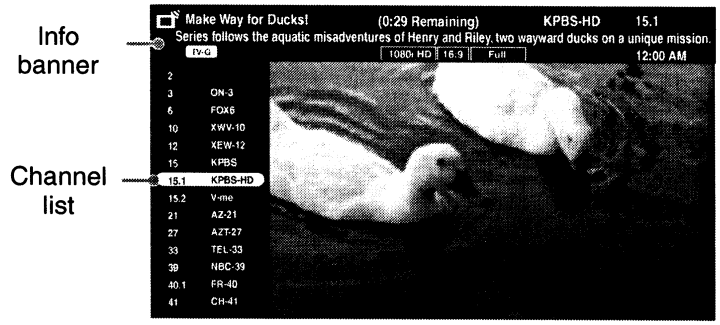
- Point your remote control directly at the IR sensor located on your TV.
- Make sure that no objects are blocking the path between the remote control and IR sensor on your TV.
- Fluorescent lamps can interfere with your remote control; try turning off the fluorescent lamps.
- If you are having troubles with the remote control, reinsert or replace your batteries and make sure that they are correctly inserted.

Remote Control

- The **5** and **CH +** buttons have a tactile dot. Use them as a reference when operating the TV.

Button	Description
1 **DISPLAY**	Press once to display the information pertaining to the channel and/or program when available. The OSD (On Screen Display) will time out in a few seconds or press again to immediately turn off the display.
2 **SLEEP**	Press repeatedly until the TV displays the time in minutes (**Off**, **15**, **30**, **60** or **120 minutes**) that you want the TV to remain on before shutting off. To cancel **Sleep**, press SLEEP repeatedly until **Off** appears.
3 **THEATER**	Press to turn on and off the **Theater Mode**. The picture settings will be set for a cinema-like experience and the audio will be switched to the audio output of the attached speakers of your BRAVIA Theatre Sync audio system. Your BRAVIA Theatre Sync audio system must be connected by an HDMI connection to your TV (see page 19 for details).
4 **SOUND**	Press repeatedly to step through the **Sound Mode** settings: **Dynamic**, **Standard**, **Game**, **Clear Voice**, **Flat**. These **Sound Mode** settings can be also accessed in the **Sound** menu (see page 34).
5 **PICTURE**	Press repeatedly to cycle through the available picture modes: **Vivid**, **Standard**, **Cinema**. The picture modes can also be accessed in the **Picture** menu. For details, see page 34.



Button	Description
6 **GUIDE** *(For all channels including Digital/Analog channels)*	Press to display the Guide when you are watching channels (if it is available from the station). **Using the Guide** The Guide allows you to select the channels from a channel list; also provides information about the current program being shown on each channel.  • Program information in the guide is provided by the broadcasters. As a result, it may sometimes include only the channel number, without a program title or description.
7 **RETURN**	Press to go back to the previous screen or exit from the screen when displaying menu items and settings.
8 **MENU**	Press to display the menu with TV functions and settings. See "Using TV Menus" on page 31.
9 **CC**	Press to turn on and off the **Closed Captions (CC)**. To change or customize the **CC** display, see page 41.
10 **0-9/ENT**	Press 0-9 to select a channel; the channel changes after few seconds. Press ENT to change channels immediately.
11 ·	Use with 0-9 and ENT to select digital channels. For example, to enter 2.1, press 2, ·, 1 and ENT.
12 **VOL +/–**	Press to adjust the volume.
13 **MUTING**	Press to mute the sound. Press again or press **VOL +** to restore the sound.
14 **POWER**	Press to turn on and off the TV.

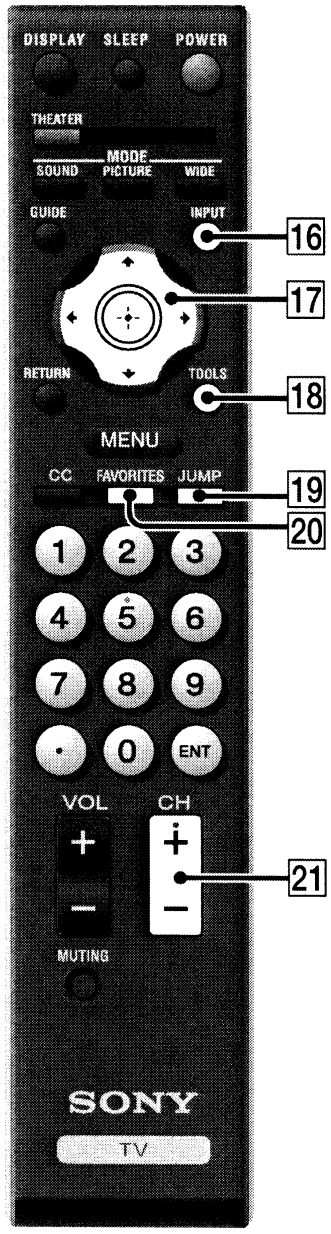
(Continued)

Button	Description
15 **WIDE**	Press repeatedly to step through the **Wide Mode** settings: **Wide Zoom**, **Normal**, **Full**, **Zoom**. The **Wide Mode** settings can be also accessed in the **Screen** menu (see page 36).

Changing the Wide Screen Mode

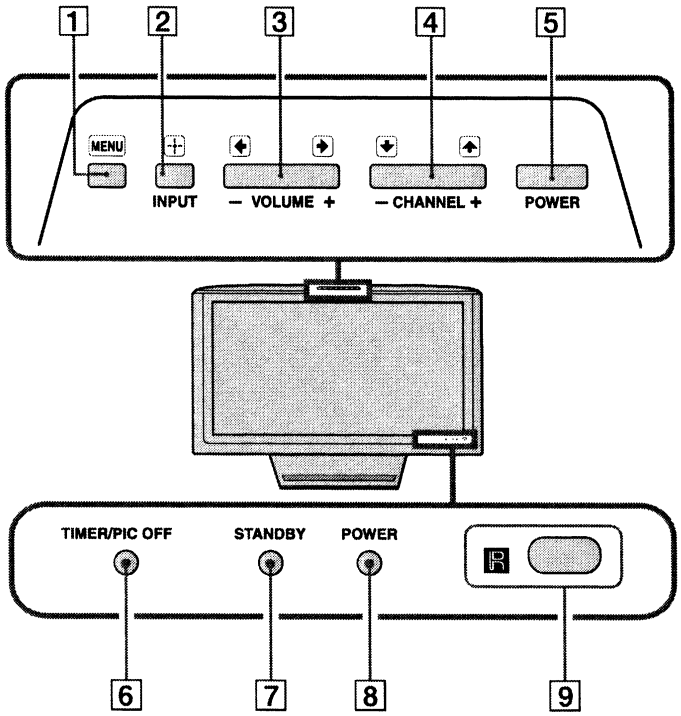
4:3 Original source Standard-definition source	**16:9 Original source** High-definition source
Wide Zoom	**Wide Zoom**
Normal	**Normal** This mode is not available
Full	**Full**
Zoom	**Zoom**

- When the TV receives a 720p or 1080i signal, **Normal** cannot be selected.



Button	Description
16 **INPUT**	Press to display the list of **External Inputs** and TV mode. Press repeatedly to toggle through the inputs. ✍ • See page 41 (**Label Inputs**) on setting up the **External Inputs** labels.
17 ↑/↓/←/→ ⊕	Press ↑/↓/←/→ to move the on-screen cursor. Press ⊕ to select/confirm an item.
18 **TOOLS**	This button supports different functions depending on the condition. When PC input is active, press TOOLS to view a channel at the same time as a **PIP** (picture in picture) screen (see page 33 for details). When antenna input is active and the broadcast includes Regional Digital Ratings, press TOOLS to view the list of special ratings. When an HDMI controlled equipment is active, press TOOLS to access the equipment menu, if the equipment supports the function.
19 **JUMP**	Press to alternate between two channels. The TV will alternate between the current channel and the last channel tuned with the buttons 0-9 and · on the remote control.
20 **FAVORITES**	This feature lets you create and choose a list of up to 8 favorite channels. Press ↑/↓ to select the option **Add to Favorites**, and press ⊕ to add the current channel to your **Favorites** list. ✍ • Your **Favorites** list will be cleared each time you run **Auto Program** (see pages 37).
21 **CH +/–**	Press to scan through channels. To scan quickly through channels, press and hold down either **+/–**.

TV Controls/Indicators



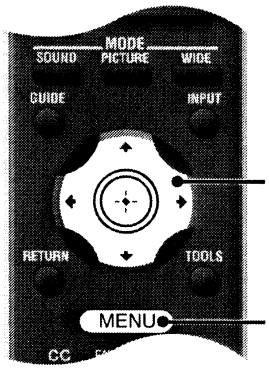
Item	Description
1 **MENU**	Press to display the menu with TV functions and settings (see "Using TV Menus" on page 31).
2 **INPUT**	Press to display the **External Inputs** list, toggle through the list and select your desired input. In the menu screen, this button serves as confirming the selection or setting.
3 **– VOLUME +**	Press to adjust the volume. In the menu screen, these buttons serve as left/right buttons.
4 **– CHANNEL +**	Press to scan through channels. In the menu screen, these buttons serve as up/down buttons.
5 **POWER**	Press to turn on and off the TV.
6 **TIMER/PIC OFF LED**	Lights up in amber when the timer is set. When the timer is set, this LED will remain lit even if the TV is turned off. For details, see page 42. If the LED blinks in red continuously, this may indicate the TV needs servicing (see contacting Sony information on the back cover). Lights up in green when the **Backlight** feature is activated.
7 **STANDBY LED**	Light up in red when your TV is in PC standby mode.
8 **POWER LED**	Lights up in green when the TV is turned on.
9 **(IR) Infrared Receiver**	Receives IR signals from the remote control.
Light Sensor	Senses room light level and adjusts the screen brightness accordingly (see page 34 for details). Do not put anything near the sensor, as its function may be affected.

- Make sure that the TV is turned off before unplugging the power cord. Unplugging the power cord while the TV is turned on may cause the POWER LED to remain lit for up to 20 seconds or may cause the TV to malfunction.

Using TV Menus

MENU provides one button access for controlling your TV. It enables you to perform a variety of tasks intuitively with a control panel on the screen.

Navigating through TV Menus



1. Press MENU on the remote control to display the menu options.
2. To highlight a menu option press ←, then press ↑/↓ to go through the menus.
3. To select an option press ⊕ or →.
4. Press ↑/↓ to select or adjust your desired option, then press ⊕.
5. To exit press MENU.

Menu Descriptions

Shortcuts

The **Shortcuts** menu lets you select: **External Inputs**, **Favorites**, and shortcuts to **Wide Mode**, **Clock/Timers**, **Parental Lock**, **Closed Captions (CC)** and **Cable**; you can also select **PC-PIP** function from this menu.

Picture

The **Picture** menu is used to fine tune the image quality and allows you to customize several parameters for optimal viewing. Select from: **Picture Mode**, **Backlight**, **Picture**, **Brightness**, **Color**, **Hue**, **Color Temp** (Color Temperature), **Sharpness**, **Advanced Settings**, or **Reset**.

Sound

The **Sound** menu allows you to fine tune and change audio. Select from: **Sound Mode**, **Dolby Pro Logic II**, **Steady Sound**, **Balance**, **Speakers**, **Backlight**, **Alt. Audio/MTS**, **Test Tone** or **Reset**.

Screen

The **Screen** menu allows you to change the proportions of the screen. Select from: **Wide Mode**, **Auto Wide**, **4:3 Default**, **Vertical Center**, **Vertical Size** or **Phase**.

Channel

The **Channel** menu is used to provide maintenance to the channel options. Select from: **Favorites**, **Cable**, **Add Digital Channels**, **Auto Program**, **Show/Hide Channels**, **Label Channels** or **Diagnostics**.

Parental Lock

The **Parental Lock** feature allows you to set up the TV to block programs according to their content and rating levels. Use 0-9 on the remote control to enter a four-digit password. The first time you create a password, confirm the password by entering it again.

Setup

The **Setup** menu provides you additional features like: **Closed Captions (CC)**, **Info Banner**, **Label Inputs**, **Skip Inputs**, **Clock/Timers**, **Language**, **Auto Sort Control**, **Control for HDMI**, **Update Control for HDMI List** or **Product Support**.

(Continued)

Using the Shortcuts Menu

External Inputs

This feature lets you select the external inputs connected to your TV.

1 Press ▲/▼ to choose an external input from the list of 9 inputs.

2 To select press ⊕.

- To exit from external inputs list, press MENU.
- To change external inputs again, repeat steps 1-2.
- To go back to channels, press **CH +/–** to go through the channels or repeat steps 1-2 and select TV; or press FAVORITES to select a channel from your **Favorites** list.
- You can also access the **External Inputs** list directly by pressing INPUT without having to navigate through the Menu.

Favorites

This feature lets you create and choose a list of up to 8 favorite channels.
Press ▲/▼ to select the option **Add to Favorites**, and press ⊕ to add the current channel to your **Favorites** list.

- You can also press FAVORITES to see your Favorite Channel list.

Wide Mode

This option is a direct shortcut to the **Screen** menu to adjust the picture size in the **Wide Mode** option (see page 36).

Clock/Timers

This option is a shortcut to adjust **Clock/Timers** on **Setup** menu (see page 42).

Parental Lock

This option is a shortcut to the **Parental Lock** menu which allows you to enter a password to block channels (see page 38).

Closed Captions (CC)

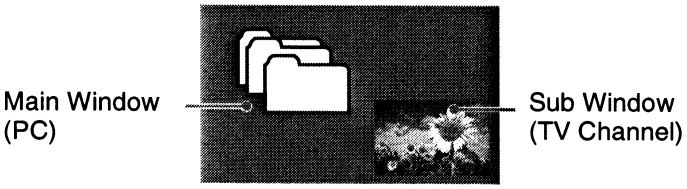
This option is a shortcut to **Closed Captions (CC)** screen on **Setup** menu (see page 41).

Cable

This option is a shortcut to adjust **Cable** setting on **Channel** menu (see page 37).

PC-PIP

This **PIP** (picture in picture) feature provides PC input signal and TV channels, allowing you to view two pictures simultaneously. When you select this feature from **Shortcuts** menu, the **PC-PIP** will appear with a Sub Window to see TV channels at the same time.



- You need a PC input signal to use **PC-PIP** function.
- To turn on or off the Sub Window on the screen press TOOLS from the remote control while using the PC input.
- You can also select **PC** input from the **External Inputs** list. Press MENU, select **External Inputs**, then select **PC** input from the list.

To Change Channels in the Sub Window

Press **CH +/–** to change the channels or enter the channel number using the 0-9 numeric buttons.

To Exit from PC-PIP (PC input)

1 Press MENU and select **External Inputs** on the **Shortcuts** menu.

2 From **External Inputs** list, select **TV** input to return to TV channels.

- To exit from **PC-PIP**, you can also select a channel from your **Favorites** channels list on the **Shortcuts** menu.
- When the PC input signal is selected with the Sub Window active, you can only see TV channels; other external inputs are not available for this view (like VCR/DVD).
- **Closed Captions (CC)** is not available in the Sub Window.
- **Parental Lock** feature will work in the Sub Window; a padlock will appear on the blocked channels.

(Continued)

Using the Picture Menu

Picture Mode *Customized picture viewing*	**Vivid**	For enhanced picture contrast and sharpness.
	Standard	For standard picture settings. Recommended for home entertainment.
	Cinema	For viewing film-based content. Most suitable for viewing in a theater-like environment.
Backlight	Press ◆/◆ to brighten or darken the backlight, then press ⊕ to set.	
Picture	Press ◆/◆ to increase or decrease picture contrast, then press ⊕ to set.	
Brightness	Press ◆/◆ to brighten or darken the picture, then press ⊕ to set.	
Color	Press ◆/◆ to increase or decrease color intensity, then press ⊕ to set.	
Hue	Press ◆/◆ to increase or decrease the green or red tones, then press ⊕ to set.	
Color Temp (Color Temperature)	**Cool**	Gives the white colors a bluish tint.
	Neutral	Gives the white colors a neutral tint.
	Warm 1, 2	Gives the white colors a reddish tint.
Sharpness	Press ◆/◆ to sharpen or soften the picture, then press ⊕ to set.	
Advanced Settings	**Noise Reduction**	Reduces the noise level of connected equipment, and the CABLE/ANTENNA input.
	Black Corrector	Enhances black areas of the picture for stronger contrast.
	Gamma	Adjusts the balance between the light and dark areas of the picture.
	Clear White	Emphasizes white and light colors.
	Live Color	Makes colors more vivid and reproduces clear skin tones.
	Light Sensor	Select **On** to enable the automatic picture (screen) brightness control. The light sensor measures the room brightness which allows the TV to automatically adjust the backlight brightness based on the picture settings and the ambient room light conditions. ✍ • Be sure not to put anything around the sensor, as its function may be affected. • In low light the range of the backlight control is reduced when **Light Sensor** is set to **On**.
Reset	Resets the current **Picture Mode** setting to factory default values.	

Using the Sound Menu

Sound Mode	**Dynamic**	Enhances the sound of action movies, sports events and musical videos.
	Standard	Standard sound optimized for home use.
	Game	Enhances the video games sound.
	Clear Voice	Enhances the voice sound; recommended for television news and documentary programs.
	Flat	Original sound without enhancements.

Dolby Pro Logic II	Press ↑/↓ to highlight an effect from the list; then press ⊕ to select.	
	Movie	This mode is useful to replay the movie sound like movie theaters.
	Music	For steady music signals; gives natural sound to music and an environment like concerts.
	Matrix	Simulate multi-channel sound; great for mono programs.
	Virtual	Creates a surround virtual sound, using the Dolby Pro Logic II system. On this mode we recommend to place the Satellite Speakers next to the TV (see more details on page 18).
	Off	The reception of steady or mono sound is normal.
	✍ • On **Dolby Pro Logic II Movie**, **Dolby Pro Logic II Music**, **Dolby Pro Logic II Matrix** and **Dolby Pro Logic II Virtual**, all the speakers are activated (the central speaker, both internal speakers, both Satellite Speakers and the Subwoofer) to optimize the sound on these effects we recommend to place the Satellite Speakers as shown on page 18. When the sound effect is off, the central speaker is desactivated.	
Steady Sound	**On**	Stabilizes the volume across all programs and commercials.
	Off	Turns off **Steady Sound**.
Balance	Press ←/→ to emphasize left or right speaker balance, then press ⊕ to set.	
Speakers	Select to turn on or off the internal speakers.	
Backlight	Turns off the Backlight to conserve power while the audio is left on.	
Alt. Audio/MTS	This Audio feature for current program lets you select from 8 options of alternate audio (if it is available). You can select from **English**, **Español** (Spanish), **Français** (French) or **Audio 4**, **5**, **6**, **7**, **8** audio available options. ✍ • **Alternate Audio** is disabled for analog signals and for digital signals that do not have altenate audio streams.	
	Mono	Select for mono reception. Use to reduce noise during weak stereo broadcasts.
	Stereo	Select for stereo reception when viewing a program broadcast in stereo.
	Auto SAP	Select to automatically switch the TV to second audio programs when a signal is received. If no **SAP** signal is present, the TV remains in **Stereo** mode.
Test Tone	Confirm and adjust speaker position and level.	
Reset	Resets the current **Sound** settings to factory default values.	

(Continued)

Wide Mode	These options allow you to change the proportion of the screen.	
	Wide Zoom	Select to enlarge the picture uniformly.
	Normal	Select to display 4:3 pictures in original size when the original source is 4:3.
	• **Normal** is not available when you are watching 1080i or 720p in high-definition source.	
	Full	Select to enlarge the picture horizontally to fill the screen when the original source is 4:3 (standard-definition source). When the original source is 16:9 (high-definition source), select this mode to display 16:9 picture in original size.
	Zoom	Select to enlarge the original picture without distorting the aspect ratio.
	• If you press WIDE on the remote control, you can also select these modes directly.	
Auto Wide	**On**	Select to have the screen automatically change to the screen mode based upon program's content. Typically this requires special setup on DVD equipment's menu. If frequent screen changes are disturbing to you, select **Off**.
	Off	Select to turn off the **Auto Wide** option. Choose a screen mode from the **Wide Mode** option.
4:3 Default	Select the default Screen Mode to use for 4:3 sources.	
	Wide Zoom	Select to enlarge the 4:3 picture to fill the 16:9 screen, keeping the original image as much as possible, with minimal distortion.
	Normal	Select to display the 4:3 picture in its original size.
	Full	Select to enlarge the picture horizontally to fill the screen when the original source is 4:3 (standard-definition source).
	Zoom	Select to enlarge the original picture without distorting the aspect ratio.
	Off	To turn **Off** automatic size for 4:3.
Vertical Center	Allows you to move the position of the picture up and down.	
Vertical Size	Allows you to adjust the vertical size of the picture.	
Phase	Adjusts to fine tune overall sharpness.	
	• **Phase** is disabled when the TV is receiving a different video input than PC.	

Using the Channel Menu

Favorites

Lets you set up a list of up to 8 of your favorite channels.
Press ↑/↓ to select the option **Add to Favorites** and press ⊕ to add the current channel to your **Favorites** list.
To select a favorite channel from the list, press ↑/↓ to go through the list and ⊕ to select the channel.

- To exit press MENU.
- To quickly access the **Favorites** channel list, press FAVORITES when there is no menu on the screen.

Cable

On	Select if you are receiving cable channels via cable TV provider.
Off	Select if you are using an antenna.

Add Digital Channels

Select to add digital channels without replacing the original channel list. Be sure to set **Cable** setting to **On** or **Off** in **Channel** menu for the correct type of input signal you choose.

Auto Program

Automatically sets up the channel list on the TV for all receivable channels (Digital and Analog).

- Before starting **Auto Program**, be sure to turn **On** or **Off** on **Cable** option in the **Channel** menu. When it is **On**, the TV will search cable channels; when it is **Off**, the TV will search over-the-air signals with an antenna connection.
- If you are using an A-B RF switch (not supplied) to switch between cable or antenna connection, be sure to select the correct **Cable** option to **On** or **Off** in the **Channel** menu.

1. Select **Auto Program**.
2. Select **OK** to start **Auto Program**. When **Auto Program** is done, select **OK**.

- **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program, some channels may not be available.**

Show/Hide Channels

Allows you to show or hide channels that appear when you use the **CH +/–** button.

1. Press ↑/↓ to scroll through the channels until you find the channel you want to show or hide.
2. Press ⊕ to determine if the channel will be shown or hidden.

To show or hide more channels, repeat steps 1-2.

Label Channels

Allows you to assign labels to channel numbers.

1. Press ↑/↓ to scroll through the channel numbers. Then press ⊕ to select the channel number that you want to assign a label.
2. Press ←/→/↑/↓ to move through the label characters (A-Z, 0-9) and press ⊕ to select it. To move to the next character press ←/→/↑/↓. Repeat to add up to 7 characters to the label. Then select Enter on screen to set it. To assign labels to more channels, repeat steps 1-2.

- To delete a character select ◁ on screen.
- To have a space between characters select ▷ on screen.
- To exit press RETURN.

Diagnostics

Allows to confirm the current channel performance indicator.

(Continued)

Using the Parental Lock

The **Parental Lock** feature allows you to block programs according to their content and rating levels and block channels (regardless of the programs). Password is necessary in setting up blocking. Use ⓪-⑨ on the remote control to enter a four digit password. The first time you create a password, confirm the password by entering it again.

To View Blocked Programs

Press ENT when tuned to a blocked program, then enter the password. To reactive the **Parental Lock** settings, turn off and on the TV.

Rating	**Off**	Turn **Parental Lock Off**. No programs are blocked from viewing based on their rating.
	Child	Maximum ratings permitted are: **U.S**: TV-Y, TV-G, G **Canada**: C, TV-Y
	Youth	Maximum ratings permited are: **U.S**: TV-PG, PG **Canada**: C8+, PG, 8 ans+, TV-PG
	Young Adult	Maximum ratings permitted are: **U.S**: TV-14, PG-13 **Canada**: 14+, 13 ans+, TV-14
	Custom	Select to set ratings manually: **U.S**: See page 40 for details. **Canada**: See page 40 for details.
	✍ • If you are not familiar with the **Parental Guideline** rating system, you should select **Child**, **Youth** or **Young Adult** to help simplify the rating selection. To set more specific ratings, select **Custom**.	
Digital Rating *(Available only in U.S.A. where advanced ratings exist)*	**Off**	Turn **Digital Rating** off. No programs containing digital ratings are blocked from viewing.
	Custom	Select to customize the **Parental Lock** with downloadable digital ratings.
	Clear All	Select to clear the downloaded ratings. To cancel just select **Cancel**.
Unrated *(Available only when **Country** is set to **U.S.A.**)* *Block programs or movies that are broadcast without a rating*	**Allow**	Allows programs and movies that are broadcast without a rating.
	Block	Blocks all programs and movies that are broadcast without a rating.
	✍ • If you block unrated TV programs, be aware that the following types of programs may be blocked: programs broadcast from another country, emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.	

Channel Block	Allows you to block channels regardless of program ratings. The password needs to be set up prior to blocking channels. The blocked channel can only be viewed by entering the correct password. **To block a channel** Press ↑/↓ to go through the channels and press ⊕ to **Block** or **Allow** channels. **To view a blocked channel** Press ENT when tuned to a blocked program, then enter the password. To reactivate the **Parental Lock** settings, turn off and on the TV.	
External Input Block	Allows you to block individual video inputs. Press ↑/↓ to scroll through the video inputs and press ⊕ to **Block** or **Allow**.	
Change Password	Select to change your password. Use 0-9 buttons to select a four digit password; to confirm password enter it again. ✍ • You need your password for any future access into the **Parental Lock** settings. If you lose your password, see "Lost Password" on page 45.	
Select Country	**U.S.A.**	Select to use U.S.A. ratings.
	Canada	Select to use Canadian ratings.

(Continued)

Custom Rating System Chart

US Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for the U.S., select **U.S.A.** in the **Select Country** setting (see page 39).

Movie Rating	**G**	All children and general audience.
	PG	Parental guidance suggested.
	PG-13	Parental guidance for children under 13.
	R	Restricted viewing, parental guidance is suggested for children under 17.
	NC-17 and X	No one 17 or under allowed.
TV Rating *Block programs by their rating, content or both*	Age-Based Ratings	
	TV-Y	All children.
	TV-Y7	Directed to children age 7 and older.
	TV-G	General audience.
	TV-PG	Parental guidance suggested.
	TV-14	Parents strongly cautioned.
	TV-MA	Mature audience only.
	Content-Based Ratings	
	FV	Fantasy violence.
	D	Suggestive dialogue.
	L	Strong language.
	S	Sexual situations.
	V	Violence.

✍

• To ensure maximum blocking capability, set the Age-Based Ratings.

Canadian Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for Canada, select **Canada** in the **Select Country** setting (see page 39).

English Rating	**C**	All children.
	C8+	Children 8 years and older.
	G	General programming.
	PG	Parental guidance.
	14+	Viewers 14 and older.
	18+	Adult programming.
French Rating	**G**	General programming.
	8 ans+	Not recommended for young children.
	13 ans+	Not recommended for ages under 13.
	16 ans+	Not recommended for ages under 16.
	18 ans+	Programming restricted to adults.
U.S.A. Rating	See **TV Rating** under **U.S.A.** above for details.	

Closed Captions (CC) Allows you to select from several closed captions modes (for programs that are broadcast with closed captioning).
Select: **Off** (to turn off **Closed Captions**), **On** (to turn on **Closed Captions**), or **Program** (to program **Closed Captions**).

Programming Closed Captions

If you select the **Program** option under **Closed Captions**, you can change the following settings:

Basic	Allows you to select basic closed caption options (EIA-608).	
	CC1, **CC2**, **CC3**, **CC4**	Displays a printed version of the dialog or sound effects of a program (should be set to **CC1** for most programs).
	Text1, **Text2**, **Text3**, **Text4**	Displays network/station information presented using either half of the whole screen (if available).
Digital CC	Allows you to set digital closed captioning to **Basic** (digital EIA-608) or **Advanced** (digital EIA-708).	
Advanced	Allows you to select advanced digital (EIA-708) closed caption options. Select from the available options.	
Advanced Settings	Customize the **Closed Captions (CC)** displays with **Character Style**, **Character Color**, **Character Size**, **Character Opacity**, **Character Align**, **Edge Color**, **Edge Type**, **Background Color**, **Background Opacity** or **Window Color**.	

- **Closed Captions (CC)** can be turned on and off by pressing the CC button on the remote control.

Info Banner Sets **On** or **Off**. When **On**, displays the program name and the remaining time (if the broadcaster offers this service). Displays for a few seconds when the channel is changed. If you don't want to display the **Info Banner**, select **Off**.

Label Inputs Allows you to identify A/V equipment you connected to the TV, such as a VCR, DVD, etc. For example, if you have a DVD player connected to the VIDEO 1 input, you can select the label DVD for the VIDEO 1 input. Then when you press INPUT to change inputs, the label you assigned to that input appears on screen.

1 Press ↑/↓ to highlight the input (from 1 to 7) to which you want to assign a label, then press ⊕ to select it.

2 Press ↑/↓ to highlight one of the displayed labels, then press ⊕ to select it.

You can select from the following labels for each input:
DVD, **VCR**, **Blu-ray**, **Cable Box**, **Satellite**, **DVR**, **Game**, **Camcorder** or **Custom** (to customize, follow the same steps of **Label Channels** on page 37).

Skip Inputs Useful to disable inputs to which no equipment is connected.

(Continued)

Clock/Timers	**Sleep**	Set the time in minutes (**Off**, **15**, **30**, **60** or **120 minutes**) that you want the TV to remain on before shutting off automatically.
	Timer	You can use the **Timer** to tune to a specific channel at a scheduled time. Select **Off** to turn off the timer (previous settings are saved). **On** to turn on the timer (previous settings are saved) or **Program**, to set the timer by **Time**, **Duration**, **Days**, **Source**, **Channel** and **Volume** that you want to tune to a specific channel at scheduled time. If you select **Program**, press ↑/↓ (change the values) or ←/→ (move through the options) to set the hour, minutes, AM/PM, duration, days, source, channel and volume. You can also set a channel by pressing ⓪-⑨ (numeric values) and ⊙ (if the channel is digital) on the remote control. To replace a channel press → on the remote control, then press ← to go back to the channel selection and enter a new channel number. ✍ • **Timer** feature will be not available until you set the **Current Time**.
	Current Time	Select to set the current time (day, hour, minutes and AM/PM). **1** Press ⊕ to select **Current Time**. **2** Press ↑/↓/←/→ to set day, hour, minutes and AM/PM. **3** Press MENU to exit.
Language		Select to display all on-screen settings in your language of choice: **English**, **Español** (Spanish), **Français** (French).
Auto Sort Control		Select **On** if you want to sort the **Shortcuts** menu and **Inputs** list, based on the most frequent selections; select **Off** if you don't want to sort.
Control for HDMI		Allows your TV to communicate with other equipment that supports **Control for HDMI** function.
Update Control for HDMI List		Update equipments list connected to the HDMI input.
Product Support		Provides information related to troubleshooting and contact information. Select **OK** to reset the TV to factory default values, or **Cancel** if you do not want to reset the TV to factory default values.

Other Information

Troubleshooting

If you have additional questions, service needs, or required technical assistance related to the use of your Sony TV, please visit our website or call one of the following numbers:

http://www.sony.com/tvsupport
1-800-222-SONY(7669) for US Support
1-877-899-SONY(7669) for Canadian Support

Condition	Explanation/Solution
No picture	
No picture.	❑ Confirm your external inputs list and make sure you select TV (cable/antenna channels). See page 32 for more details. ❑ Perform **Auto Program** to add receivable channels that are not presently in the TV's memory (page 37). ❑ If there is no signal, the screen saver will appear.
Cannot receive any channels.	❑ Make sure the power cord is connected securely. ❑ Turn on the power of the TV. ❑ Check antenna/cable connections. ❑ Perform **Auto Program** to add receivable channels that are not presently in the TV's memory (page 37). **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program some channels may not be available.**
TV is locked to one channel.	❑ Perform **Auto Program** to add receivable channels that are not presently in the TV's memory (page 37).
Cannot receive or select channels.	❑ To receive or select cable channels, make sure that **Cable** in **Channel** settings is set to **On**. To receive or select UHF channels over an antenna, make sure **Cable** is set to **Off**. Perform **Auto Program** to add receivable channels that are not presently in the TV's memory (page 37).
The TV turns off automatically.	❑ Check if **Sleep** is activated, or confirm the **Duration** setting of **Timer** (see page 42). ❑ If there is no signal, the TV will turn off automatically.
No picture from some video sources.	❑ Check the connection between the optional video equipment and the TV. ❑ Press INPUT on the remote control (page 29). ❑ Press MENU on the remote control. Select your desired input from the **External Inputs** list.
Poor picture	
Double images or ghosts.	❑ Check antenna/cable connections. ❑ Check the antenna location and direction.
Only snow and noise appear on the screen.	❑ Check if the antenna is broken or bent. ❑ Check if the antenna has reached the end of its serviceable life. (3-5 years in normal use, 1-2 years at the seaside.)
Dotted lines or stripes.	❑ Keep the TV away from noise sources such as cars, motorcycles, or hair-dryers. ❑ If using 300 ohm twin lead, move the excess lead away from the TV or try using 75-ohm coaxial cable instead.
No color/Dark picture/Color is not correct/The picture is too bright.	❑ Press PICTURE on the remote control to select the desired picture mode (page 26). ❑ Adjust the **Picture Mode** options in the **Picture** menu (page 34).

(Continued)

Condition	Explanation/Solution
Noisy picture.	❑ Make sure that the antenna is connected using a 75-ohm coaxial cable (not supplied). ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.
No sound/Noisy sound	
Good picture, no sound.	❑ Check the volume control. ❑ Press MUTING or **VOL +** so that "Muting" disappears from the screen (page 27). ❑ Disconnect your headphones. ❑ Set **Speaker** to **On** in the **Sound** menu (see page 34). If it is set to **Off**, sound is not output from the TV's speakers regardless of the TV's volume control.
Audio noise.	❑ Make sure that the antenna is connected using a 75-ohm coaxial cable (not supplied). ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.
PC Input	
No Picture/No Signal.	❑ Confirm the PC is correctly connected to the TV in the PC IN (not supplied HD15 cable). ❑ Ensure the output signal from the PC is one of the formats listed on page 21. ❑ Turn the PC off. Confirm the PC connection and restart the PC. Plug and play will auto-detect the TV.
Poor picture.	❑ Adjust the resolution (see page 21). ❑ Adjust **Phase** (see page 36).
General	
Wide Mode changes automatically.	❑ The current **Wide Mode** setting is automatically replaced with the **4:3 Default** setting when you change the channel or video input, if **4:3 Default** in the **Screen** menu is set to other than **Off**. If you want to lock in **Wide Mode** selected with WIDE on the remote control, set **4:3 Default** to **Off** in the **Screen** menu (page 36). ❑ Turn off the **Auto Wide** option in the **Screen** menu (see page 36).
Suddenly the picture gets smaller.	❑ The picture gets smaller during the commercials, this is due to the method the provider broadcasts their contents. When HD content channels switch to SD definition content (commercials), the picture may be small with a black border.
"Black box" on screen.	❑ You have selected a text option and no text is available (see page 41). To turn off this feature, set the **Closed Captions** option to **Off**. If you were trying to select closed captioning, select **CC1** instead of **Text1-4**.
Black bands appear at the top and bottom of the screen.	❑ Some wide screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider). ❑ Programs in 4:3 aspect ratio will have bands on left and right sides of the screen. To select full size see page 36.
Certain programs on DVD or other digital sources display a loss of detail, especially during fast-motion or dark scenes.	❑ The compression used by certain digital broadcasts and DVDs may cause your TV's screen to display less detail than usual, or cause artifacts (small blocks or dots, pixelations) to appear on your screen. This is due to your TV's large screen and ability to show very fine detail, and is normal for certain digitally recorded programs.

Condition	Explanation/Solution
Remote control does not operate.	❑ Check the polarity of the batteries or replace the batteries. ❑ Point the remote control at the remote control sensor of the TV. ❑ Fluorescent lamps can interfere with your remote control operation; try turning off the fluorescent lamps. ❑ Keep the remote control sensor area clear from obstacles.
Some digital cable channels are not being displayed.	❑ Certain cable companies have limitations on the broadcast of digital cable channels. Check with your cable company for more information. ❑ The digital cable channel may be set to **Hidden** in the **Show/Hide Channels** setting (see page 37).
Lost password.	❑ Select the **Parental Lock** menu, then enter the following master password: 4357. The master password clears your previous password and allows you to enter a new password (page 38).
How to reset the TV to factory settings.	❑ Turn on the TV. While holding down ↑ on the remote control, press **POWER** on the TV. Release the ↑ button. WARNING: Parental Lock password may be required if it has been created. The reset will clear all of your customized settings.

Specifications

Model	KDL-32N4000	KDL-37N4000
System		
Television system	NTSC: American TV standard ATSC (8VSB terrestrial): ATSC compliant 8VSB QAM on cable: ANSI/SCTE 07 2000 (Does not include CableCARD functionality)	
Channel coverage	Analog terrestrial: 2 - 69 / Digital terrestrial: 2 - 69 Analog Cable: 1-125 / Digital Cable: 1-135	
Panel system	LCD (Liquid Crystal Display) Panel	
Speaker output	35 W (7 W × 5) + 20 W Subwoofer	
Input/Output jacks		
Antenna	75-ohm external terminal for VHF/UHF	
VIDEO IN 1/2	S VIDEO (4-pin mini DIN)(VIDEO 1 only): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / C: 0.286 Vp-p (Burst signal), 75 ohms VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
COMPONENT IN 1/2	YPBPR (Component Video): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / PB: 0.7 Vp-p, 75 ohms / PR: 0.7 Vp-p, 75 ohms / Signal format: 480i, 480p, 720p, 1080i AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
HDMI IN 1/2	HDMI: Video: 480i, 480p, 720p, 1080i / Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
AUDIO OUT	500 mVrms (100% modulation) / More than 500 mVrms (Fixed)	
DIGITAL AUDIO OUT (COAXIAL)	PCM 2.0 Coaxial signal	
PC IN	D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive See the PC Input Signal Reference Chart on page 21.	
PC AUDIO INPUT	Stereo mini jack, 500 mVrms, 47 kilohms	
Headphones	Stereo mini jack / Impedance: ≥ 16 ohms	
Power and others		
Power requirement	120 V AC, 60 Hz	
Power consumption		
in use	155 W	190 W
in standby	All models less than 1 W	
Subwoofer	50 W	
Screen size (inches measured diagonally)	31.5 (32 class)	37
Display resolution (horizontal × vertical)	1,366 dots × 768 lines	
Speaker/Full range (2)	146 × 35 mm 5 3/4 × 1 3/8 inches	
Dimensions (W × H × D)		
with stand (mm/inches)	912 × 617 × 358 mm 36 × 24 3/8 × 14 1/8 inches	1,028 × 681 × 358 mm 40 1/2 × 26 7/8 × 14 1/8 inches
without stand (mm/inches)	912 × 543 × 102 mm 36 × 21 1/2 × 4 1/8 inches	1,028 × 608 × 113 mm 40 1/2 × 24 × 4 1/2 inches
Satellite Speakers (mm/inches)	202 × 617 × 179 mm 8 × 24 3/8 × 7 1/8 inches	
wall-mount hole pattern (mm)	200 × 200	300 × 300
Mass		
with stand (kg/lb.)	17 kg / 38 lb.	21 kg / 47 lb.
without stand (kg/lb.)	13 kg / 29 lb.	17 kg / 38 lb.
Satellite Speakers (kg/lb.)	1 kg / 2.2 lb.	
Supplied accessories	Remote control RM-YD026 (1) / Size AA batteries (2) / Cable holder (1 attached to the TV) / Operating Instructions (1) / Quick Setup Guide (1) / Warranty Card (1) / Online Registration Card (U.S.A. and Canada only) (1) / Safety and Regulatory Booklet (1) / Software License (1) / DIN cable (1) / Satellite Speaker Cables (2) / Cover (1)	
Optional accessories	Headphones plug adapter / Connecting cables / Wall-Mount Bracket: SU-WL500 / 75-ohm coaxial cable / HD15-HD15 cable / Satellite Speakers Wall-Mount Bracket: WS-WV10D	

• Design and specifications are subject to change without notice.

Index

0-9 button 27
4:3 Default 36

A

Add Digital Channels 37
Advanced Settings 34
Alt. Audio/MTS 35
AUDIO OUT jack, described 13
AUDIO SYSTEM jack, described 12
Auto Program 37
Auto Sort Control 42
Auto Wide 36

B

Backlight 34, 35
Balance 35
Brightness 34

C

Cable 32, 37
Cable holder 7
CABLE/ANTENNA input, described 12
Canadian Models 40
CC button 27
CH+/– button 29, 30
Change Password 39
Channel Block 39
Clock/Timers 32, 42
Closed Captions (CC) 32, 41
Color 34
Color Temp (Color Temperature) 34
COMPONENT IN jack (1080i/720p/480p/480i), described 13
Control for HDMI 42

D

Diagnostics 37
DIGITAL AUDIO OUT (COAXIAL), described 13
Digital Rating 38
DISPLAY button 26
DMPORT jack, described 13
Dolby Pro Logic II 35

E

English Rating 40
ENT button 27
External Input Block 39
External Inputs 32

F

Favorites 32, 37
FAVORITES button 29
French Rating 40

G

GUIDE button 27

H

HDMI IN jack, described 12
Headphone jack, described 11
Hue 34

I

Info Banner 41
Infrared Receiver (IR) 30
INPUT button 29, 30
Installing the TV on a wall 7, 9

J

JUMP button 29

L

Label Channels 37
Label Inputs 41
Language 42
Light Sensor
  Described 30

M

Menu
  Channel 37
  Parental Lock 38
  Picture 34
  Screen 36
  Setup 41
  Shortcuts 32
  Sound 34
MENU button 27, 30
Movie Rating 40
MUTING button 27

P

Parental Lock 32, 38
PC IN 13
PC-PIP 33
Phase 36
Picture 34
PICTURE button 26
Picture Mode 34
POWER button 27, 30
POWER LED 30
Product Support 42

R

Rating 38
Reset 34, 35, 45
RETURN button 27

S

S VIDEO jack, described 12
Select Country 39
SERVICE ONLY 12
Setting up channels 23
Sharpness 34
Show/Hide Channels 37
Skip Inputs 41
SLEEP button 26
SOUND button 26
Sound Mode 34
Speakers 35
STANDBY LED 30
Steady Sound 35

T

Test Tone 35
THEATER button 26
TIMER/PIC OFF LED 30
TOOLS button 29
Troubleshooting 43, 44, 45
Turning on/off the TV 30
TV Rating 40

U

U.S.A. Rating 40
Unrated 38
Update Control for HDMI List 42
US Models 40

V

Vertical Center 36
Vertical Size 36
VIDEO/AUDIO (L/R) jacks, described 11, 13
VOL+/– button 27, 30

W

WIDE button 28
Wide Mode 32, 36

For Your Convenience

Please contact Sony directly if you:

- Have questions on the use of your television after reading your operating instruction manual and Quick Setup Guide
- Experience difficulty operating your television

Contact Sony Customer Support at:

http://www.sony.com/tvsupport

or to speak with a support representative:

United States
1-800-222-SONY (7669)

Canada
1-877-899-SONY (7669)

Sony will work to resolve your questions more quickly than your retailer or place of purchase.

Please Do Not Return the Product to the Store

http://www.sony.net/

Printed in U.S.A.

3-291-228-**11**(1)
3291228111

SONY

KDL-26N4000
KDL-32N4000
KDL-37N4000

Quick Setup Guide

For further information, see the Operating Instruction Manual supplied with the TV.
Please retain this guide for your future reference.

For Your Convenience

Please contact Sony directly if you have questions on the use of your television after reading your Quick Setup Guide and Operating Instruction Manual.

Contact Sony Customer Support at:

http://www.sony.com/tvsupport

Or to speak with a support representative:

United States	**Canada**
1-800-222-SONY (7669)	1-877-899-SONY (7669)

Please Do Not Return the Product to the Store

©2008 Sony Corporation Printed in U.S.A.

Connecting Your New BRAVIA® Flat-panel LCD HDTV

Congratulations! Your new BRAVIA® TV opens the door to the "Stunning HD Experience". This guide will explain how to get the most from your new High-Definition TV.

Learn more. Visit the Sony HDTV Learning Center
http://www.learningcenter.sony.us/home.php
Please take these steps before you power up your **BRAVIA**:

- Register online at:
  www.sony.com/registration (from U.S.A.)
  www.SonyStyle.ca/registration (from Canada)
- Make sure you've removed all accessory contents from packaging.
- Install 2 AA batteries (supplied separately) in your remote control.
- Determine whether you will mount your TV on a wall or place it on the Subwoofer. Sony wall-mounting brackets are designed to provide the best fit. Refer to the Operating Instruction Manual for more information.
- Give your TV 2 3/8 inches (6 cm) of space behind it to properly ventilate.

The Four Steps to a Stunning HD Experience: Set, Sound, Source, and Setup

Along with your **BRAVIA** TV **set**, a complete HD system requires an HD **sound** system, a **source** of HD content, and proper **setup** connection with components such as your HD cable or satellite box.
You must get HD programming to experience the stunning detail of HDTV.

The quality of the image you see on your **BRAVIA** can only be as high as the quality of the signal it is displaying. This chart shows the different signal types and how to access them.

Best Signal Performance

	Comments	Sources
High Definition Content	Best Picture Quality 16:9 Aspect Ratio	HD Over-The-Air Antenna HD Cable Subscription/ Programming HD Satellite Subscription
Digital Content	Good Picture Quality Aspect Ratio based on Program	Over-The-Air Antenna Digital Cable Subscription Digital Satellite Subscription
Analog Content	Original TV format 4:3 Aspect Ratio	Over-The-Air Antenna Cable Subscription

Contact your cable or satellite provider to upgrade your service to HD. Receive over-the-air HD broadcasts with an HD-quality antenna (www.antennaweb.org) and discover the wealth of entertainment now available on super-high-resolution Blu-ray Disc™.

Your **BRAVIA** TV must be properly connected to components such as sound system and cable or satellite box.

See reverse side of this poster for sample connection diagrams.

- Turn off and unplug all components before making connections.
- Do not turn on the TV until connection setup is completed.

Audio/Video Performance

Input Connector	Video Connection	Audio Connection	High or Standard Definition Quality
HDMI 1 **HDMI 2**	HD **HDMI connection***	HDMI cable carries both video and audio signals. (*When HDMI is connected to DVI with an adapter, a separate audio L/R is necessary.)	1080i, 720p, 480p, 480i, PC (Compatible with HD or SD content)
Component 1 **Component 2**	HD **Component connection**	**Audio L/R**	1080i, 720p, 480p, 480i (Compatible with HD or SD content)
Video 1	**S VIDEO connection** (Use this connector in place of composite video connector)	**Audio L/R**	480i (SD content)
Video 1 **Video 2**	**Composite video connection**	**Audio L/R**	

What is HDMI™?

HDMI (High-Definition Multimedia Interface) cables are the standard for connecting HDTV. They are built to properly handle high bandwidth, uncompressed video and multi-channel audio—all in one cable.

Connecting a PC to Your BRAVIA

- May require **DVI-to-HDMI** adapter and separate audio connector when connecting to the HDMI input.
- Connect PC's audio output when using a Digital Video Interface (DVI) or HD15 connection.
- Press PC's FUNCTION Key + Select Output to transmit to TV.
- When using an HD15 connection, adjust TV's **Phase** to correct sharpness.
- Refer to your **BRAVIA** Operating Instructions Manual for more information.

To learn more about HDTV, visit
http://www.learningcenter.sony.us/home.php

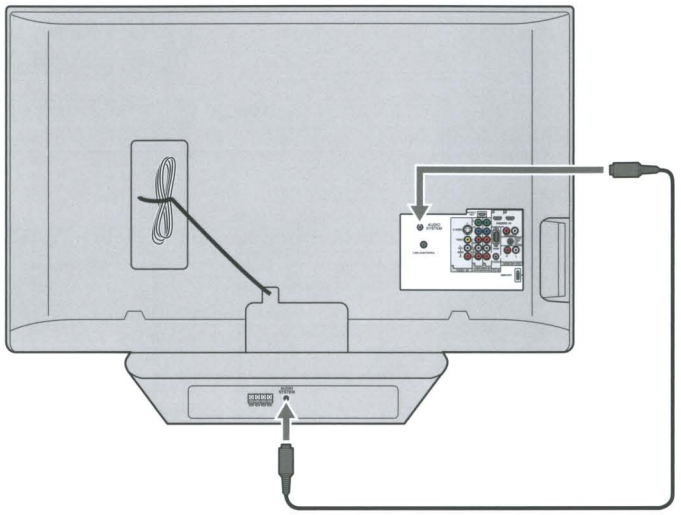
Surround Sound System

To further enhance the sound quality, connect the subwoofer before using the TV. Models **KDL-32N4000** and **KDL-37N4000** also need to connect the 2 Satellite Speakers (supplied).

✍

• Before connecting the Subwoofer, be sure to attach the Subwoofer to the TV.

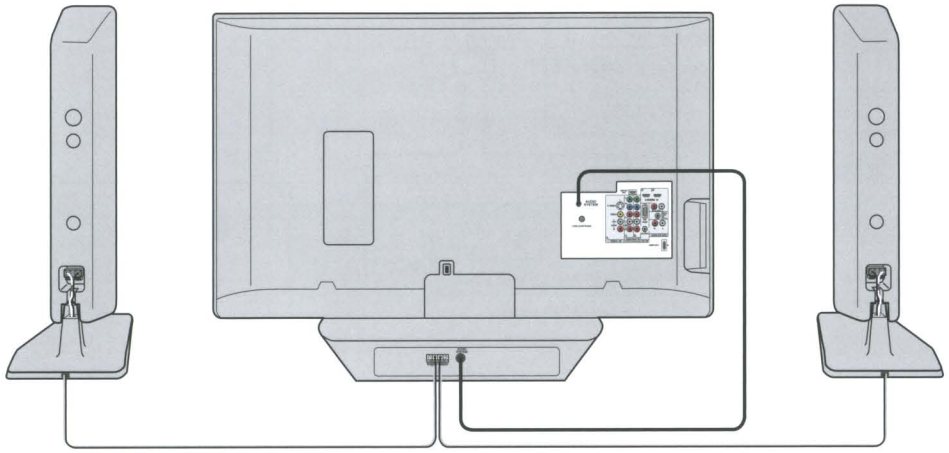
1 Using DIN cable (supplied) connect the AUDIO SYSTEM output on the rear of the TV to the AUDIO SYSTEM input on the Subwoofer as shown below.



✍

• Do not connect unspecified cable to the TV AUDIO SYSTEM input. Connecting other equipment can cause a malfunction or damage the TV.

2 For models **KDL-32N4000** and **KDL-37N4000**, the Satellite Speakers (supplied) must be connected after Subwoofer connection is completed.
Connect the supplied cables to the Satellite Speakers inputs, make sure to connect the black cables to the black jacks of the Satellite Speakers, and the red cables to the corresponding red jacks.
Connect the Satellite Speakers cables to the Subwoofer output. Connect white cable (with the red mark) from the Satellite Speakers to the R+ and L+ Subwoofer jacks (red) and the black cables from the Satellite Speakers to the R- and L- Subwoofer jacks (black).



✍

• After DIN cable connection is done, plug the TV's AC power cord to the wall outlet.

To Do List

When the **Initial Setup** is completed, consider carrying out these items:

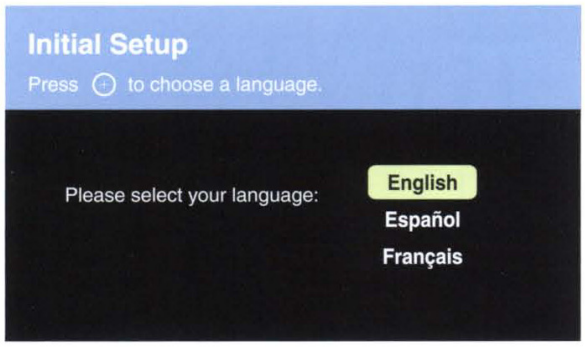
Set Clock/Timers
Set Closed Captions (CC)
Set Parental Lock
Show/Hide Channels
Label Video Inputs (skip inputs)
Label Channels
Set Picture Mode
Set Sound Mode

For details, refer to your **BRAVIA** Operating Instruction Manual.

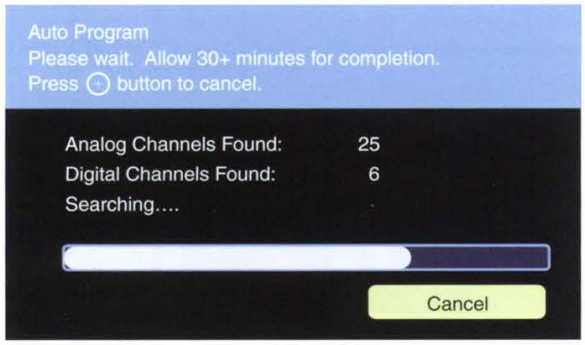
Running Initial Setup

After you finish connecting your TV, you need to run the **Initial Setup**. The **Initial Setup** screen appears when you turn on your TV for the first time.

1 Press POWER ◯ to turn on the TV. The **Initial Setup** screen appears.
Press ⬆/⬇ to highlight the desired language, then press ⊕.



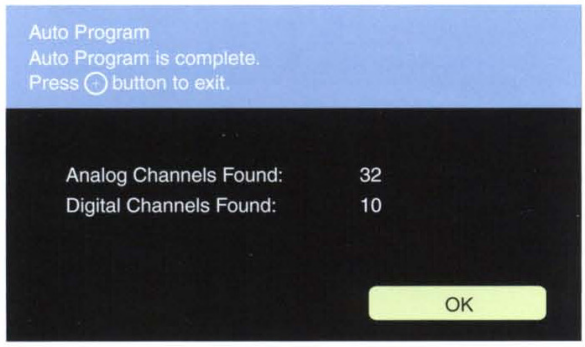
2 Connect cable or antenna, then select **Yes** to start **Auto Program**. Your TV will detect the type of signal connected and will start scanning for the available channels.



✍

- If you have both cable and antenna available, please connect cable first.
- **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program, some channels may not be available.**

3 Follow the help text provided on the screen to run **Auto Program**.
When the searching of channels is done, press ⊕ to complete the **Auto Program** process.



✍

- If you did not follow the **Initial Setup** instructions when you turn on your TV for the first time, check the Operating Instructions Manual for procedure on running **Auto Program** under **Channel** menu.

Watching Your TV

Select Your Content Source

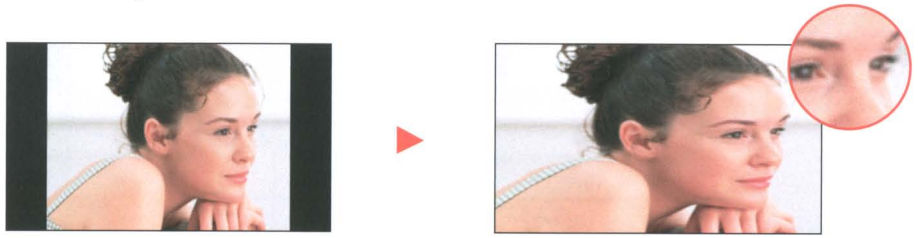
Whether you are watching cable, satellite or broadcast TV; playing a VCR, DVD or Blu-ray Disc; or connecting to your PC, you need to choose the correct Input using your remote control:

- Press MENU on your remote control to display on-screen the **Shortcuts** menu, then select **External Inputs** and will appear the list of external inputs; or
- Press INPUT to display the list of external inputs and choose the desired input.

Adjust Screen Shape and Aspect Ratio

High-definition and standard-definition signals are transmitted with different aspect ratios (the width-to-height ratio of the image). Most HD signals use a wide screen aspect ratio of 16:9. The 16:9 fills your **BRAVIA** screen, maintaining a crisp, clear, vivid picture.

Most standard-definition signals use a boxy 4:3 aspect ratio. When a 4:3 image is displayed on an HDTV, you will see black bars on the sides. The picture quality may not be as sharp as with HD sources.



- Press WIDE on your remote control to display the **Wide Mode** setting of your preference.

Customize Sound and Picture Quality

You can choose optimum sound and picture settings to match the content you are displaying on your TV:

- Press MENU on your remote control and select **Picture** or **Sound** menu, then choose the appropriate setting for your content.
- Use the remote control PICTURE to quickly adjust picture quality.
- Refer to your **BRAVIA** Operating Instructions Manual for more information.

To learn more about HDTV, visit
http://www.learningcenter.sony.us/home.php

1 THEATER

- Press THEATER to turn on the **Theater Mode**.
- This function activates the picture settings for a cinema-like experience. Sound settings will be switched to the audio output of the attached speakers of your BRAVIA Theater Sync™.

2 SOUND

- Press SOUND for **Sound Mode** settings to **Dynamic, Standard, Clear Voice, Game** or **Flat**.

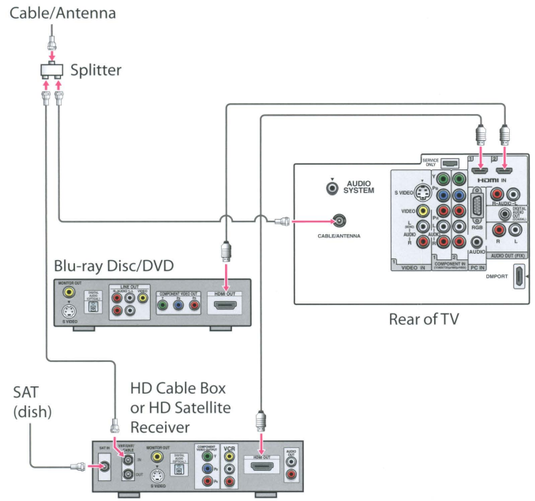
3 GUIDE

- Press GUIDE to display the channels guide.
- This option allows you to select the channels from a channel list and also provides information about the current program being shown on each channel (if it's available from the station).

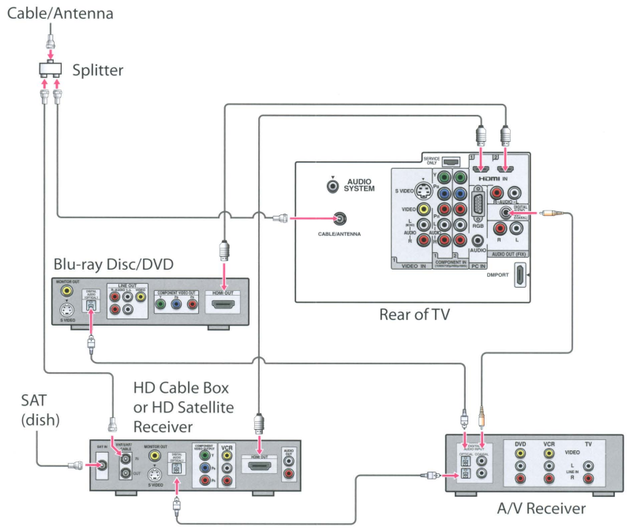
4 FAVORITES

- This feature lets you create and choose a list up to 8 favorite channels.
- Press FAVORITES to access to your **Favorites** channel list.
- Press ↑/↓ to select the option **Add to Favorites**; then press ⊕ to add the current channel to your **Favorites** list.

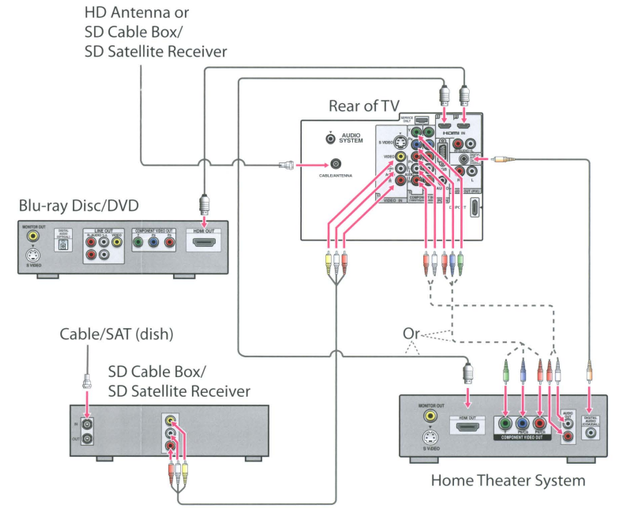
HD Basic Connection



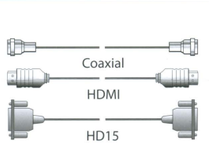
HD Basic Connection with A/V Receiver

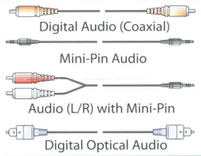


HD Basic Connection with Home Theater System



Required Cable Types for Connection

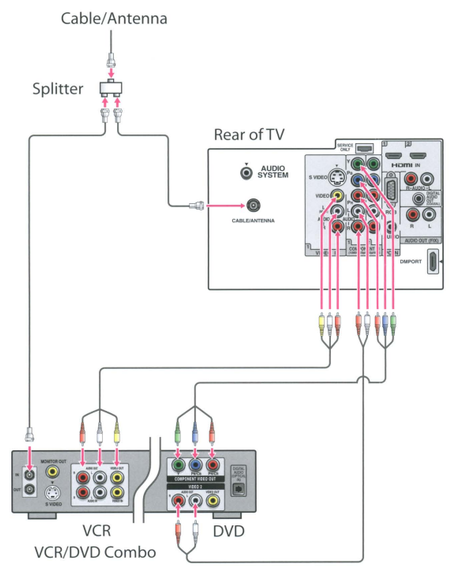




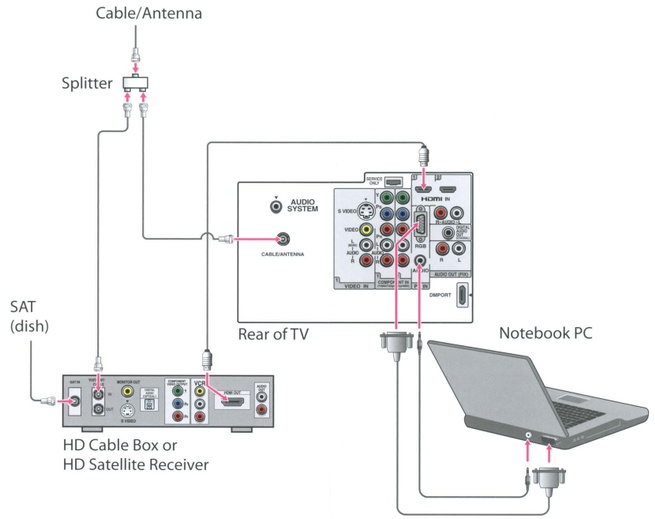
Notes on Connection:

- Your TV is equipped with two HDMI inputs, connect your incoming signal source (HD Cable Box, HD Satellite Receiver, or DVD) with an HDMI or component video for the best possible picture quality.
- If the equipment has a DVI and not a HDMI connector, use a HDMI to DVI cable or adapter to connect the DVI output to either HDMI IN 1 or HDMI IN 2 input, and connect the audio jacks to the AUDIO (L/R) jacks below the HDMI IN 2. (DVI connector is for video signals only. The Audio jacks provide support for the audio.)
- **PIP** functions require Cable/Antenna connection.
- When receiving High-Definition content signal by over-the-air antenna, it is best to use the HD antenna.
- When using a DVI-to-HDMI cable, make sure to connect the DVI side first.

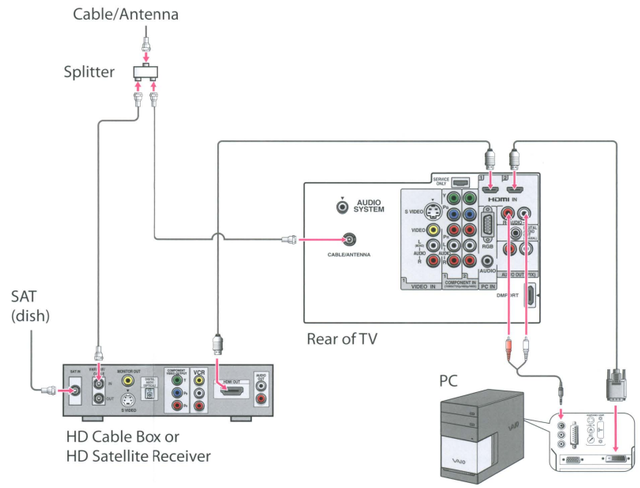
Basic Connection with SD VCR/DVD



Notebook PC Connection



Desktop PC Connection



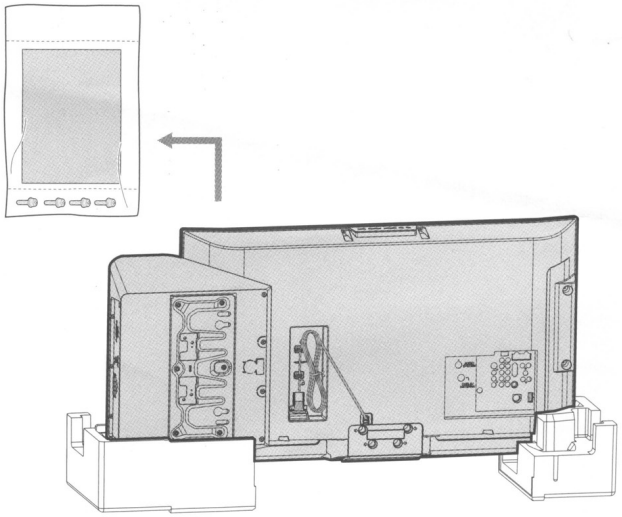
SONY

KDL-26N4000/KDL-32N4000/KDL-37N4000
KDL-26FA400/KDL-32FA400/KDL-37FA400

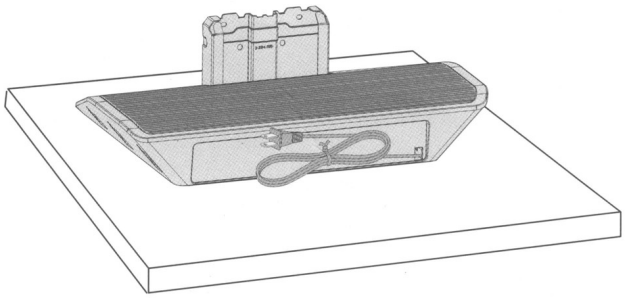
3-295-212-**11**(1)

Attaching the Subwoofer
Instalación del Subwoofer
Fixation de l'ifragrave

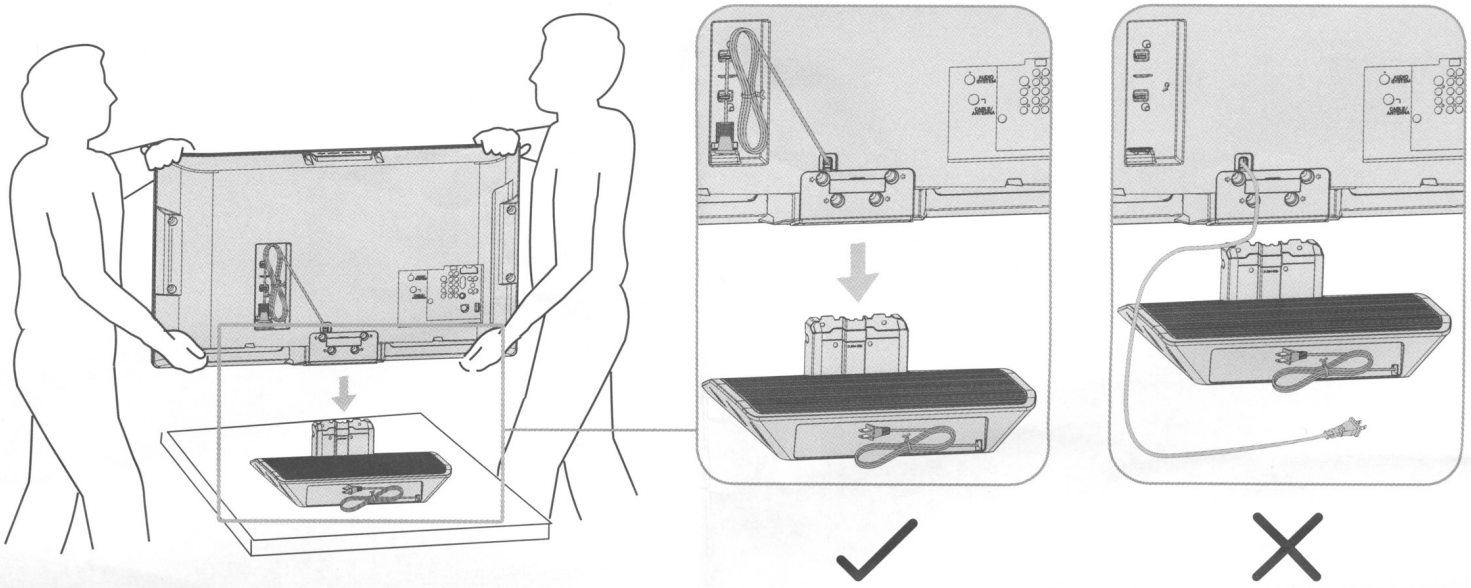
1



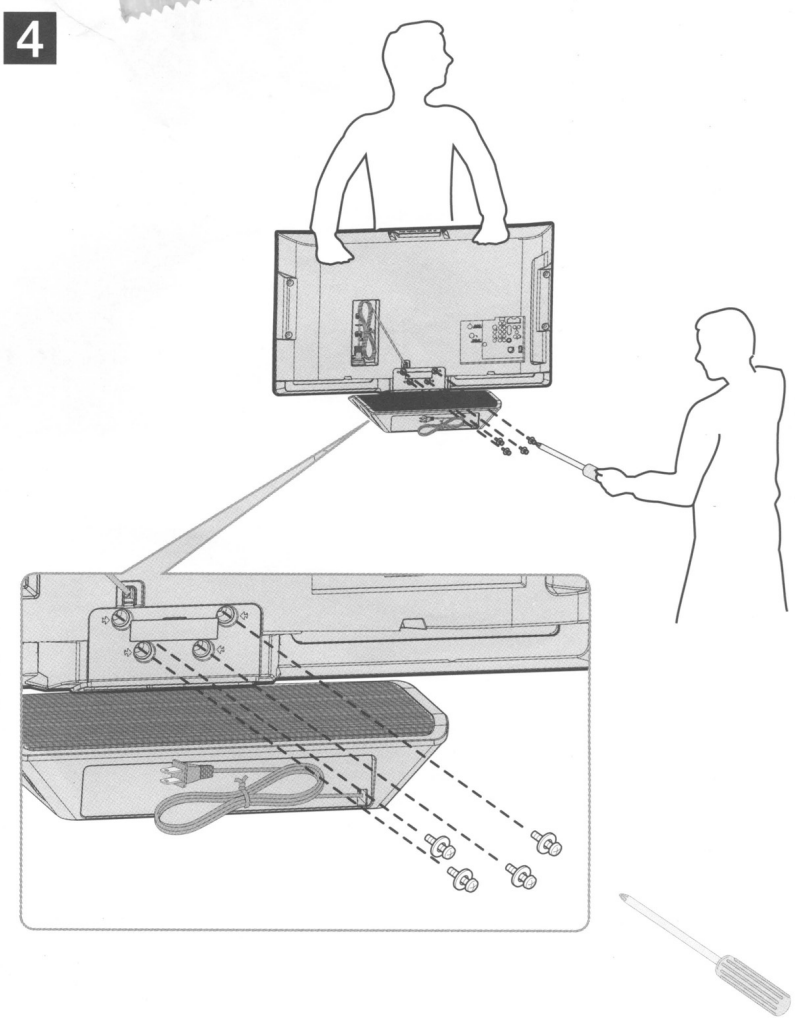
2



3



4



© 2008 Sony Corporation

Printed in Mexico

3295212111

Product Registration

SONY®

Thank you for purchasing this Sony product. Sony product registration is quick, easy and secure, and creates a record that can be used if your product is lost or stolen. It also allows us to send you periodic mailings about new products or contact you in the unlikely event that a safety notification is required. Please take the time to register the product at our web site:

From U.S.A.: http://productregistration.sony.com
From Canada: http://www.SonyStyle.ca/registration

If you have any operational questions regarding your new purchase, please see the instruction manuals and support documents that came with your Sony product.
Thank you.

© 2006 Sony Electronics Inc.

2-186-742-**24**(1)

Enregistrement de produit

SONY

Nous vous remercions d'avoir acheté ce produit Sony. L'enregistrement des produits Sony est rapide, facile et sécuritaire, et nous permet de créer un dossier qui peut être utilisé en cas de perte ou de vol de votre produit. Il nous permet également de vous envoyer des envois périodiques au sujet de nouveaux produits ou de vous contacter dans le cas peu probable où une notification de sécurité serait requise. Veuillez prendre le temps d'enregistrer le produit sur notre site Web :

Aux États-Unis : http://productregistration.sony.com
Au Canada : http://www.SonyStyle.ca/registration

Pour toute question sur le fonctionnement de votre nouvel achat, veuillez consulter les modes d'emploi et autres documents de soutien fournis avec votre produit Sony.
Merci !

2186742241

© 2006 Sony Electronics Inc.

2-186-742-**24**(1)

3-275-539-11(1)

3275539111

NOTICES AND LICENSES FOR SOFTWARE USED IN THIS TELEVISION

INDEPENDENT JPEG GROUP SOFTWARE

The module, libjpeg.so is the work of the Independent JPEG Group.

© copyright 1991 - 1998, Thomas G. Lane. All rights reserved.

SOFTWARE DEVELOPED BY THE OPENSSL PROJECT FOR USE IN THE SSL TOOLKIT

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.
This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).
The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:" This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related:-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:" This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

FREETYPE2 SOFTWARE

Portions of this software are copyrighted ©_1996-2002. The FreeType Project (www.freetype.org). All rights reserved.

THE FREETYPE PROJECT IS PROVIDED ``AS IS'' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY DAMAGES CAUSED BY THE USE OR THE INABILITY TO USE, THE FREETYPE PROJECT.

EXPAT SOFTWARE

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper
Copyright (c) 2001, 2002, 2003 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

CURL SOFTWARE

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2006, Daniel Stenberg, <daniel@haxx.se>.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

Printed in Mexico

GPL/LGPL LICENSED SOFTWARE

The following GPL executables and LGPL libraries are used in this product and are subject to the GPL/ LGPL License Agreements included as part of this documentation:

GPL Executable:
AMD GTX2.0 tool-chain Linux Kernel
Busybox
insmod
pmon

LGPL Libraries:
glibc
gcc

Source code for these executables and libraries can be obtained using the following link:
http://www.sony.com/linux

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA. Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this Licease. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

GNU LESSER GENERAL PUBLIC LICENSE
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.
The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy. This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.
You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library,
with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above pecified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you
distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public license as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

SONY

Safety and Regulatory Booklet

Read and understand the contents of this booklet before operating your new TV.

Feuillet de consignes d'utilisation et de sécurité

Veuillez lire et vous assurer de comprendre le contenu de ce feuillet avant d'utiliser votre nouveau téléviseur.

Folleto de instrucciones de seguridad

Lea y entienda el contenido de este folleto antes de operar su nuevo televisor.

© 2008 Sony Corporation

Printed in Mexico

3-299-071-**01**(1)

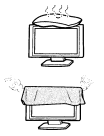
3299071011

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.

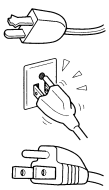
6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.



8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/ accessories specified by the manufacturer.

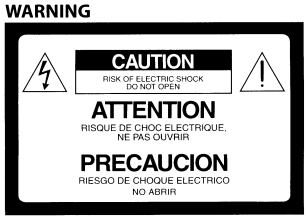
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Please observe the Additional Safety DOs and DON'Ts to avoid electrical shock, short-circuit, fire, bodily injury or property damage.

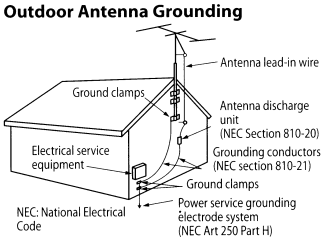
WARNING



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the TV's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the TV.

Outdoor Antenna Grounding


Antenna lead-in wire
Ground clamps
Antenna discharge unit (NEC Section 810-20)
Electrical service equipment
Grounding conductors (NEC section 810-21)
Ground clamps
Power service grounding electrode system (NEC Art 250 Part H)
NEC: National Electrical Code

Additi

MOISTURE

To reduce the risk of fire or electric shock, do not expose this TV to rain or moisture.

- ❒ The TV must never be exposed to dripping, splashing, or spilling liquids of any kind.
- ❒ Do not place liquid filled objects such as a vase or potted plant on the TV.
- ❒ Do not use a power line operated TV set near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, wet basement or near a swimming pool, etc.

CLEANING

When cleaning, be sure to unplug the power cord to avoid any chance of electric shock.

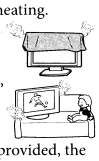
- ❒ Clean the cabinet of the TV with a dry soft cloth.

- ❒ Wipe the LCD screen gently with a soft cloth.
- ❒ Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.
- ❒ If using a chemically pretreated cloth, please follow the instruction provided on the package.
- ❒ Never use strong solvents such as a thinner, alcohol or benzine for cleaning.
- ❒ Periodic vacuuming of the ventilation openings is recommended to ensure to proper ventilation.

VENTILATION

The ventilation openings in the TV are necessary to ensure reliable operation of the TV and to protect it from overheating.

- ❒ Do not block or cover the ventilation openings with cloth or other materials.
- ❒ Never place the TV on a bed, sofa, rug or other similar surface where ventilation openings may be blocked.



- ❒ Unless proper ventilation is provided, the TV may accumulate dust and cause damage.
- ❒ Never allow liquid or solid objects to fall into the ventilation openings.

- ❒ If any liquid or solid object falls inside the TV, unplug the TV immediately and have it checked by qualified service personnel before operating it further.
- ❒ Never push objects of any kind into the TV through the ventilation openings as they may come in contact with dangerous voltage points or short out parts that could result in a fire or an electric shock.

Allow adequate space around the TV set to ensure proper air circulation.

- ❒ Never place the TV in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

- ❒ There should be a clearance of at least 11 7/8 inches (30 cm) above the TV set and 4 inches (10 cm) on each side. If mounted on the wall, allow at least 4 inches (10 cm) of clearance at the bottom of the screen. (See additional information provided in the Operating Instructions manual.)

INSTALLATION

The TV should be installed near an easily accessible AC power outlet.

- ❒ Do not install the TV face up or down, upside down or on its side.
- ❒ Do not install the TV in hot, oily, humid, or excessively dusty places.
- ❒ Do not install the TV in places subject to extreme temperature, such as in direct sunlight, near a radiator or a heating vent. The TV may overheat in such conditions which can cause deformation of the enclosure and/or TV malfunction.

- ❒ Do not install the TV in a place exposed to direct air conditioning; moisture may condense inside and may cause TV malfunction.

- ❒ Do not install the TV where it may be exposed to mechanical vibration.
- ❒ Do not install the TV where insects may enter.
- ❒ Do not install the TV in a location where it may protrude, such as on or behind a pillar, or any place you might bump your head or receive bodily injury.
- ❒ To prevent fire keep flammable objects or open flame (e.g. candles) away from the TV.
- ❒ Do not place optional equipment on top of the TV.

Prevent the TV from toppling over

Take measures to prevent the TV from toppling over and causing injury or damage to the TV and property.

- ❒ Secure the TV to a wall and/or stand.
- ❒ Never install the TV on unstable and/or uneven surfaces.
- ❒ Do not allow children to climb on or play with furniture and TV sets.
- ❒ Do not install the TV on furniture that can easily be used as steps, such as a chest of drawers.
- ❒ Care should be taken to install the TV where it cannot be pushed, pulled over, or knocked down.
- ❒ Care should be taken to route all AC power cords and connecting cables so that they cannot be pulled or grabbed by curious children.

Medical institutions

Do not place this TV in a place where medical equipment is in use. It may cause a medical equipment malfunction.

Outdoor use

Do not install this TV outdoors. The TV should not be exposed to rain or direct sunlight in order to avoid damage and possible fire or electric shock.

Do not install this TV in a vehicle, ship or other vessel

- ❒ Excessive bumping motion of a moving vehicle or continuous swaying motion on a boat may cause the TV to fall down and cause injury.

- ❒ Exposing the TV to seawater may cause a fire, electric shock or damage to your TV.

Magnetic influence

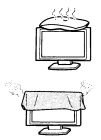
- ❒ This TV contains a strong magnet in the speaker unit that generates a magnetic field. Keep any items susceptible to magnetic fields away from the speaker.
- ❒ Electro-magnetic radiation emitted from optional equipment installed too close to the TV may cause picture distortion and/or noisy sound.

Consignes de sécurité importantes

1) Lisez les directives suivantes.
2) Conservez ces directives.
3) Observez et respectez tous les avertissements.
4) Suivez toutes les directives.
5) N'utilisez pas cet appareil près de l'eau.

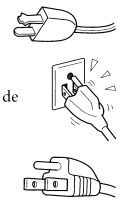
6) Nettoyez cet appareil uniquement avec un chiffon sec.

7) Ne bouchez pas les fentes de ventilation. Respectez les directives du fabricant pour l'installation de l'appareil.



8) N'installez pas l'appareil à proximité d'une source de chaleur telle qu'un radiateur, une bouche d'air chaud, une cuisinière ou tout autre appareil (y compris des amplificateurs) émettant de la chaleur.

9) Ne désactivez pas le dispositif de sécurité appliqué à la fiche polarisée ou à la fiche avec mise à la terre. Une fiche polarisée est équipée de deux lames dont l'une est plus large que l'autre. Une fiche avec mise à la terre est équipée de deux lames et une broche destinée à la mise à la terre. La lame la plus large et la troisième broche sont des dispositifs de sécurité. Si vous ne réussissez pas à brancher la fiche fournie dans la prise de courant, consultez un électricien et faites remplacer la prise par une neuve.



10) Ne placez pas le cordon d'alimentation dans des endroits passants et assurez-vous qu'il ne peut pas être pincé, surtout au niveau des fiches, de la prise de courant et à l'endroit où il sort de l'appareil.

11) Utilisez uniquement les éléments de raccordement et les accessoires recommandés par le fabricant.

12) Utilisez l'appareil uniquement avec le chariot, le trépied, le support ou la table recommandés par le fabricant ou achetés avec l'appareil. Lorsque vous utilisez un chariot, prenez des précautions en déplaçant le chariot et l'appareil afin de ne pas les renverser, ce qui pourrait entraîner des blessures.

13) Débranchez cet appareil en cas d'orage ou lorsque vous ne l'utilisez pas pendant de longues périodes.

14) Pour toute réparation, adressez-vous à un réparateur qualifié. Faites réparer l'appareil s'il a été endommagé de quelque manière que ce soit, par exemple si le cordon d'alimentation ou sa fiche sont endommagés, si du liquide ou tout autre corps étranger a pénétré dans l'appareil, si l'appareil a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas normalement ou s'il est tombé.

Veuillez respecter les consignes de sécurité supplémentaires pour éviter les risques d'électrocution, de court-circuit, d'incendie, de blessure et de dommages à la propriété.

Reportez-vous au verso pour plus d'information.

Instrucciones importantes de seguridad

1) Lea estas instrucciones.
2) Guarde estas instrucciones.
3) Respete todas las advertencias.
4) Siga todas las instrucciones.
5) No utilice este aparato cerca del agua.

6) Límpielo únicamente con un paño seco.

7) No bloquee los orificios de ventilación. Instale el aparato según las instrucciones del fabricante.

8) No lo instale cerca de fuentes de calor como radiadores, calefactores, hornos u otros aparatos (incluidos los amplificadores) que generen calor.

9) Respete la finalidad de seguridad del enchufe polarizado o de tipo conexión a tierra. Un enchufe polarizado presenta dos contactos, uno más ancho que el otro. Un enchufe de tipo conexión a tierra dispone de dos contactos y una tercera clavija de conexión a tierra. El contacto ancho o la tercera clavija se suministra para su seguridad. Si el enchufe suministrado no encaja en la toma de corriente, póngase en contacto con un electricista para el reemplazo del tomacorriente que quedó obsoleto.

10) Para proteger el cable de alimentación, aléjelo de lugares de paso o donde pueda ser aplastado, especialmente en la punta de los enchufes, los tomacorrientes o el punto donde el cable sale del aparato.

11) Utilice únicamente los complementos o accesorios especificados por el fabricante.

12) Utilícelo únicamente con el carro, pedestal, trípode, abrazadera o mesa especificados por el fabricante o vendidos con el aparato. Si utiliza un carro, tenga cuidado al moverlo junto con el aparato para evitar lesiones en el caso de una caída.

13) Desenchufe el aparato durante tormentas eléctricas o cuando no se utilice durante períodos de tiempo prolongados.

14) Solicite servicio técnico únicamente a personal de servicio técnico especializado. Será necesario solicitar servicio técnico si el aparato ha sufrido daños como, por ejemplo, si el cable de alimentación o el enchufe están dañados, se ha vertido líquido o se ha caído algún objeto dentro del aparato, o bien si dicho aparato ha sido expuesto a la lluvia o a humedad, no funciona correctamente o se ha caído.

Tenga en cuenta las advertencias de seguridad adicionales para evitar descargas eléctricas, cortocircuitos, incendios, lesiones corporales o daños materiales.

Consulte el reverso para obtener más información.

nal Safety DOs and DON'Ts

Wall-mount use

- ❒ Wall-mount installation requires the use of a Wall-Mount Bracket. When installing or removing the TV and the Wall-Mount Bracket, be sure to use qualified contractors. If not properly secured during installation or removal from the Wall-Mount Bracket, the TV may fall and cause serious injury.
- ❒ Be sure to follow the installation guide supplied with the Wall-Mount Bracket when installing the TV.
- ❒ Be sure to attach the brackets with the specified parts supplied with the Wall-Mount Bracket.
- ❒ Do not hang the TV from the ceiling. It may fall and cause serious injury.
- ❒ Do not hang anything on the TV.
- ❒ Do not allow children to climb on the TV.

AC POWER CORD

- ❒ Do not touch the AC power cord and its plug with wet hands as it may cause electric shock.
- ❒ When disconnecting the AC power cord, grasp the plug and disconnect from the wall outlet first. Do not pull by the cord.

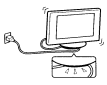
- ❒ Keep the power cord away from heat sources.

A TV set with a three-wire grounding type AC power cord plug must be connected to an AC power outlet with a protective earthing connection.

- ❒ Do not convert or damage the AC power cord.
- ❒ Consult your electrician to have the outlet changed to suit your TV.

Subjecting the AC power cord to wear and/or abuse can damage the AC power cord and your TV.

- ❒ Do not place the TV where the power cord can be easily pinched, bent, twisted, or catch your feet.



- ❒ Do not allow anything to rest on or roll over the cord.
- ❒ Before connecting cables, be sure to unplug the AC power cord for your safety.
- ❒ Do not move the TV with the AC power cord (or other cables such as audio and video) connected.
- ❒ Use only an original Sony AC power cord with your TV; no brand substitution is allowed.
- ❒ Do not use AC power cord supplied with the TV with any other equipment.
- ❒ Never use a damaged AC power cord. A damaged AC power cord can cause a short-circuit, which may result in a fire or electric shock.

Do not use a damaged or poorly fitting AC power outlet as your TV's power source.

- ❒ Insert the plug fully into the outlet. If it is loose, it may cause arcing and result in a fire.

- ❒ Do not overload the same AC power outlet.

Unplugging the AC power cord from the wall outlet will completely remove power from the TV.

- ❒ During lightning storms or when the TV is left unattended and unused for extended periods of time, the AC power cord should be unplugged from the wall outlet. This will avoid possible damage to your TV. Also unplug the antenna to prevent damage to the TV.

- ❒ For energy conservation and safety reasons, practice unplugging the AC power cord from the AC power outlet.

Clean the AC power plug

Unplug the AC power plug and clean it occasionally to avoid dust from accumulating. While cleaning, look for signs of damage. A damaged AC power cord should never be used.

ACCESSORIES

Keep small accessories out of children's reach. Use only the specified accessories with this TV.

Volume Adjustment

- ❒ When using headphones, adjust the volume to avoid excessive audio levels from causing possible hearing loss.

BATTERIES

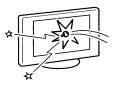
Your remote control batteries are consumables.

- ❒ To preserve our environment, dispose of used batteries according to your local laws or regulations.
- ❒ Do not dispose of batteries in a fire.
- ❒ Do not short-circuit, disassemble or overheat the batteries.
- ❒ Replace only with the same or equivalent type of batteries. Using incorrect replacement batteries can lead to an explosion.

LCD SCREEN

- ❒ Although the LCD screen is made with high-precision technology and has effective pixels of 99.99% or more, black dots or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD panel and is not a malfunction.
- ❒ The LCD screen is made with high-precision technology and to achieve a high level of performance and picture quality, this TV's backlight setting is set to maximize the brightness of the TV. However, uneven brightness may be observed when the LCD TV is viewed in a dark ambient without an input source or with a blank screen. This condition is normal and not a malfunction of the TV. Changing the Picture mode, Backlight setting, enabling the Light Sensor, or turning on the Power Management will improve this condition.
- ❒ To avoid damaging the LCD panel, do not expose the LCD screen to direct sunlight.
- ❒ Do not push or scratch the LCD screen, or place objects on top of the TV. The images may be uneven or the LCD panel may be damaged.
- ❒ If the TV is used in a cold place, the picture may smear or become dark. This does not indicate a failure. These phenomena improve as the temperature rises.
- ❒ Ghosting may occur when still pictures are displayed continuously. It should disappear after a few moments.
- ❒ The LCD screen and enclosure get warm when the TV is in use. This is not a malfunction.
- ❒ Avoid spraying insect repellent with volatile material on the LCD screen.
- ❒ Avoid prolonged contact with rubber or plastic material to the LCD screen.

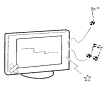
Broken screen panel



Do not throw anything at the TV as the impact can cause the LCD screen glass to crack, break or scatter.

- ❒ If damage occurs to the LCD panel, small traces of liquid crystal sandwiched between the glass may be found on scattered broken glass.
- ❒ Do not touch the broken glass with bare hands. As with any broken glass pieces, avoid skin contact and exposure to your eyes or mouth. Avoid direct contact with liquid or damp surfaces of the glass as these may have an adverse effect on some people. The contacted area should be rinsed thoroughly with water. If conditions persist, see your doctor.
- ❒ If the surface of the TV cracks, do not touch the TV until you have unplugged the AC power cord. Otherwise electric shock may result.

SERVICING



Do not use the TV if you suspect the TV is damaged or if the TV is damaged.

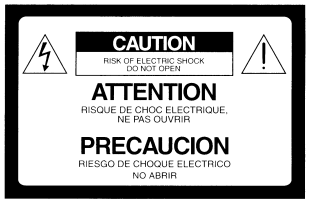
- ❒ Do not attempt to service the TV yourself since opening the cabinet may expose you to dangerous voltage levels or other hazards. Refer all servicing to qualified service personnel.

- ❒ If replacement parts are required, acquire a written certification from the service technician which states that adequate replacement parts with the same or similar characteristics as the original parts have been used. Unauthorized substitutions may result in a fire, an electric shock or other hazards.

Safety check

- ❒ Upon completion of any TV servicing or repair, ask the service technician to perform routine safety checks as specified by Sony and to certify that the TV is safe to operate. Have a qualified service technician dispose of the TV if it is not safe to operate.

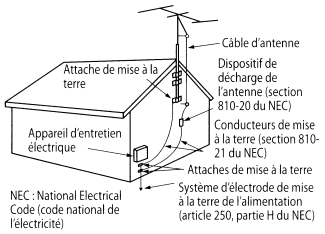
AVERTISSEMENT



Ce sigle vise à signaler à l'utilisateur la présence d'une « tension dangereuse » non isolée au sein du téléviseur, dont la puissance peut être suffisante pour provoquer un risque d'électrocution.

Ce sigle vise à signaler à l'utilisateur la présence d'une documentation importante concernant les instructions de fonctionnement et d'entretien de ce téléviseur.

Mise à la terre de l'antenne extérieure


Câble d'antenne
Dispositif de décharge de l'antenne (section 810-20 du NEC)
Attache de mise à la terre
Appareil d'entretien électrique
Conducteurs de mise à la terre (section 810-21 du NEC)
Attaches de mise à la terre
Système d'électrode de mise à la terre de l'alimentation (article 250, partie H du NEC)
NEC : National Electrical Code (code national de l'électricité)

HUMIDITÉ

Afin de réduire les risques d'incendie et d'électrocution, n'exposez pas ce téléviseur à la pluie ou à l'humidité.

- ❒ Le téléviseur ne doit jamais être exposé aux éclaboussures, au déversement ou à l'égouttement de liquides, quels qu'ils soient.
- ❒ Ne placez pas d'objets contenant des liquides, tels qu'un vase ou une plante en pot, sur le téléviseur.
- ❒ N'utilisez pas un téléviseur alimenté par une source de courant électrique près de l'eau (baignoire, lavabo, évier de cuisine, cuve de lavage, piscine, sous-sol humide, etc.).

NETTOYAGE

Avant d'effectuer le nettoyage, veillez à débrancher le cordon d'alimentation pour éviter tout risque d'électrocution.

- ❒ Nettoyez le boîtier du téléviseur avec un chiffon sec et doux.
- ❒ Essuyez délicatement l'écran ACL avec un chiffon doux.
- ❒ Enlevez les taches tenaces à l'aide d'un chiffon légèrement humidifié avec une solution de savon doux et d'eau tiède.
- ❒ Si vous utilisez un chiffon prétraité avec un produit chimique, suivez bien les directives indiquées sur l'emballage.
- ❒ N'utilisez jamais de solvants corrosifs tels qu'un diluant, de l'alcool ou du benzène pour nettoyer l'appareil.
- ❒ Il est recommandé de nettoyer périodiquement les ouvertures de ventilation avec un aspirateur afin de garantir une bonne ventilation.

VENTILATION

Les ouvertures de ventilation du téléviseur sont nécessaires pour assurer le bon fonctionnement du téléviseur et le protéger de la surchauffe.

- ❒ Ne bloquez pas et ne couvrez pas les ouvertures de ventilation avec du tissu ou d'autres matériaux.
- ❒ Ne placez jamais le téléviseur sur un lit, un canapé, un tapis ou toute autre surface similaire qui pourrait bloquer les ouvertures de ventilation.
- ❒ Sans une ventilation correcte, de la poussière peut s'accumuler dans le téléviseur et provoquer des dommages.
- ❒ Ne laissez jamais tomber de liquides ou d'objets dans les ouvertures de ventilation.

- ❒ Si un objet ou du liquide tombe à l'intérieur du téléviseur, débranchez-le immédiatement et faites-le vérifier par un technicien qualifié avant de le faire fonctionner de nouveau.
- ❒ N'introduisez jamais d'objet quel qu'il soit dans le téléviseur par les fentes du boîtier, car il pourrait toucher des points de haute tension ou court-circuiter des pièces et provoquer un incendie ou l'électrocution.

Laissez un espace suffisant autour du téléviseur pour assurer une circulation d'air adéquate.

- ❒ N'installez jamais le téléviseur dans un espace restreint, comme une bibliothèque ou un meuble encastré, à moins que la ventilation nécessaire ne soit prévue.
- ❒ Laissez un espace libre d'au moins 30 cm (11 7/8 po) au-dessus du téléviseur et de 10 cm (4 po) de chaque côté. Si vous installez l'appareil au mur, laissez un espace libre d'au moins 10 cm (4 po) en dessous de l'écran. (Reportez-vous au mode d'emploi pour des renseignements supplémentaires.)

INSTALLATION

Installez le téléviseur près d'une prise de courant CA facilement accessible.

- ❒ N'installez pas le téléviseur avec l'écran vers le haut ou vers le bas, ni à l'envers ou sur le côté.
- ❒ N'installez pas le téléviseur dans des endroits chauds, huileux, humides ou excessivement poussiéreux.
- ❒ N'installez pas le téléviseur dans des endroits sujets à des extrêmes de température, par exemple à la lumière directe du soleil ou encore près d'un radiateur ou d'une bouche de chaleur. Dans de telles conditions, le téléviseur pourrait surchauffer, ce qui peut provoquer une déformation du boîtier et/ou des problèmes de fonctionnement.
- ❒ N'installez pas le téléviseur dans un endroit exposé directement à l'air climatisé; de l'humidité pourrait se condenser à l'intérieur du téléviseur et provoquer des problèmes de fonctionnement.
- ❒ N'installez pas le téléviseur dans un endroit où il peut être exposé à des vibrations mécaniques.
- ❒ N'installez pas le téléviseur dans un endroit où peuvent pénétrer les insectes.
- ❒ N'installez pas le téléviseur dans un endroit d'où il dépasserait, par exemple sur ou derrière une colonne, ou dans un endroit où vous pourriez le heurter de la tête et vous blesser.
- ❒ Pour éviter les risques d'incendie, tenez les objets inflammables et la flamme nue (p. ex. les bougies) à distance du téléviseur.
- ❒ Ne posez aucun appareil sur le téléviseur.

Prévenez le basculement du téléviseur

Prenez les mesures nécessaires afin d'éviter que le téléviseur ne bascule, ce qui pourrait provoquer des blessures ou des dommages au téléviseur ou à d'autres objets.

- ❒ Fixez lé téléviseur à un mur ou à un support.
- ❒ N'installez jamais le téléviseur sur une surface inégale et/ou instable.
- ❒ Ne laissez pas les enfants jouer avec le meuble ou le téléviseur et ne les laissez pas grimper dessus.
- ❒ N'installez pas le téléviseur sur un meuble qui peut facilement être escaladé, par exemple une commode à tiroirs.
- ❒ Veillez à installer le téléviseur dans un endroit où il ne risque pas d'être poussé, tiré ou renversé.
- ❒ Veillez à acheminer tous les cordons d'alimentation CA et câbles de raccordement de manière à ce qu'ils soient hors de la portée des enfants, qui pourraient les manipuler ou les tirer par curiosité.

Établissements médicaux

N'installez pas ce téléviseur dans un endroit où des appareils médicaux sont utilisés. Il pourrait entraîner des problèmes de fonctionnement des appareils médicaux.

Utilisation à l'extérieur

N'installez pas ce téléviseur à l'extérieur. N'exposez pas le téléviseur à la pluie ou à la lumière directe du soleil pour éviter de l'endommager et de provoquer des risques d'incendie ou d'électrocution.

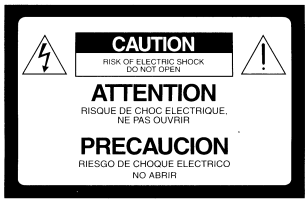
N'installez pas ce téléviseur dans un véhicule ou sur un bateau ou autre embarcation

- ❒ Les sursauts excessifs d'un véhicule en mouvement ou le mouvement de balancier répété d'un bateau peuvent faire tomber le téléviseur et entraîner des blessures.
- ❒ L'exposition du téléviseur à l'eau de mer peut poser un risque d'incendie ou causer des dommages au téléviseur.

Champ magnétique

- ❒ Les haut-parleurs de ce téléviseur contiennent un aimant puissant générant un champ magnétique. Veillez à tenir tout objet sensible aux champs magnétiques à distance des haut-parleurs.
- ❒ L'installation d'appareils externes à trop grande proximité du téléviseur peut provoquer une distorsion de l'image ou des parasites sonores, en raison des radiations électromagnétiques.

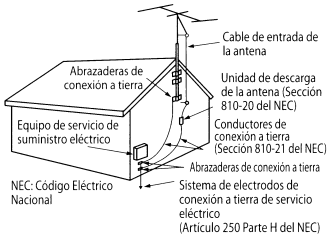
ADVERTENCIA



Este símbolo pone sobre aviso al usuario de la presencia de "voltaje peligroso" sin aislamiento en el interior del televisor, el cual puede ser de tal intensidad que podría presentar riesgo de descarga eléctrica.

Este símbolo tiene por objeto advertir al usuario que la documentación que acompaña a este televisor contiene instrucciones importantes de operación y mantenimiento (servicio).

Conexión a tierra de una antena exterior


Cable de entrada de la antena
Abrazaderas de conexión a tierra
Unidad de descarga de la antena (Sección 810-20 del NEC)
Equipo de servicio de suministro eléctrico
Conductores de conexión a tierra (Sección 810-21 del NEC)
Abrazaderas de conexión a tierra
NEC: Código Eléctrico Nacional
Sistema de electrodos de conexión a tierra de servicio eléctrico (Artículo 250 Parte H del NEC)

HUMEDAD

Para reducir el riesgo de incendio o descarga eléctrica, no exponga este televisor a la humedad ni a la lluvia.

- ❒ El televisor no debe estar nunca expuesto a goteos, salpicaduras o derrames de ningún tipo de líquido.
- ❒ No coloque objetos con líquidos, como floreros o macetas con plantas, sobre el televisor.
- ❒ No utilice un televisor que requiera alimentación eléctrica cerca del agua como, por ejemplo, cerca de bañeras, lavamanos, fregaderos o piletas de lavado, en un sótano húmedo ni cerca de una piscina.

LIMPIEZA

Durante la limpieza, asegúrese de desenchufar el cable de alimentación para evitar la posibilidad de una descarga eléctrica.

- ❒ Limpie el mueble del televisor con un paño seco y suave.
- ❒ Limpie la pantalla LCD con cuidado con un paño suave.
- ❒ Las manchas difíciles pueden limpiarse con un paño ligeramente humedecido con una solución de jabón suave y agua tibia.
- ❒ Si utiliza un paño tratado químicamente, siga las instrucciones que se indican en el paquete.
- ❒ Nunca limpie el televisor con disolventes fuertes como diluyentes, alcohol o bencina.
- ❒ Se recomienda retirar el polvo con una aspiradora de las aberturas de ventilación de forma periódica para garantizar una buena ventilación.

VENTILACIÓN

Las aberturas de ventilación del televisor son necesarias para asegurar una operación fiable del televisor y protegerlo contra el sobrecalentamiento.

- ❒ No bloquee o cubra las aberturas de ventilación con paños ni otros materiales.
- ❒ Nunca coloque el televisor sobre una cama, sofá, alfombra u otras superficies similares que puedan obstruir las aberturas de ventilación.
- ❒ Si el televisor no cuenta con una ventilación adecuada, puede acumular polvo y dañarse.
- ❒ No permita que caigan líquidos u objetos sólidos dentro de las aberturas de ventilación.

- ❒ Si caen líquidos u objetos sólidos dentro del televisor, desenchufe el televisor inmediatamente y haga que verifique su funcionamiento un técnico de reparación calificado antes de seguir operándolo.
- ❒ Nunca introduzca objetos de ningún tipo en las ranuras del mueble, ya que podrían entrar en contacto con puntos de voltaje peligrosos o causar cortocircuitos, lo cual podría ocasionar un incendio o una descarga eléctrica.

Deje suficiente espacio alrededor del televisor para garantizar una buena circulación del aire.

- ❒ Nunca coloque el televisor en un lugar cerrado, como en un librero o un mueble empotrado, a menos que haya ventilación adecuada.
- ❒ Se debe dejar como mínimo un espacio de 30 cm encima del televisor y 10 cm a cada lado. Si se monta en la pared, deje como mínimo un espacio de 10 cm debajo de la pantalla. (Consulte la información adicional que se suministra en el Manual de instrucciones.)

INSTALACIÓN

Se recomienda instalar el televisor cerca de un tomacorriente de ca de fácil acceso.

- ❒ No instale el televisor boca arriba, boca abajo, ni lo apoye sobre un lateral.
- ❒ No instale el televisor en lugares cálidos, grasientos, húmedos o expuestos a cantidades excesivas de polvo.
- ❒ No instale el televisor en lugares sometidos a temperaturas extremas, como por ejemplo los expuestos a la luz solar directa, los cercanos a un radiador o a un conducto de calefacción. El televisor podría recalentarse en tales condiciones y producir la deformación del interior del aparato y/o empezar a funcionar defectuosamente.
- ❒ No instale el televisor en un lugar expuesto de forma directa al aire acondicionado; se podría condensar la humedad en su interior y empezar a funcionar defectuosamente.
- ❒ No instale el televisor en lugares expuestos a vibraciones mecánicas.
- ❒ No instale el televisor en lugares que puedan atraer insectos.
- ❒ No instale el televisor en un lugar donde pudiera sobresalir, como encima o detrás de una columna, o donde pudiera golpearlo con la cabeza o producir lesiones corporales.
- ❒ Para evitar incendios, mantenga los objetos inflamables y llamas (por ejemplo, velas) alejados del televisor.
- ❒ No coloque ningún equipo opcional sobre el televisor.

Medidas para evitar que se vuelque el televisor

Tome las medidas adecuadas para evitar que el televisor se vuelque y provoque lesiones, que se dañe el televisor o que se produzcan daños materiales.

- ❒ Fije el televisor a la pared o a una base de soporte.
- ❒ No instale nunca el televisor sobre superficies inestables y/o desniveladas.
- ❒ No permita que los niños se suban a los muebles y al televisor o que jueguen con éstos.
- ❒ No instale el televisor sobre muebles que se puedan utilizar fácilmente como escaleras, como una cómoda.
- ❒ Procure instalar el televisor donde no se pueda empujar, hacer a un lado o derribar.
- ❒ Procure enrutar todos los cables de alimentación de ca y los cables de conexión de manera que no puedan tirar de ellos ni agarrarlos niños curiosos.

Centros médicos

No coloque el televisor en un lugar donde se utilicen equipos médicos, puesto que podría interferir con el funcionamiento de equipo médico.

Uso del televisor en un lugar exterior

No instale este televisor en un lugar al aire libre. No se debe exponer el televisor a la lluvia o a la luz solar directa para evitar daños y la posibilidad de un incendio o una descarga eléctrica.

No instale este televisor en vehículos, barcos o buques

- ❒ El movimiento excesivo del vehículo o el balanceo continuo de un barco pueden provocar la caída del televisor y causar lesiones.
- ❒ Si lo expone al agua del mar, puede provocar un incendio, una descarga eléctrica o causar daños internos.

Campos magnéticos

- ❒ En las bocinas de este televisor se encuentra un fuerte imán que genera un campo magnético. Mantenga alejado de las bocinas del televisor cualquier elemento susceptible de daños producidos por campos magnéticos.
- ❒ La radiación electromagnética emitida desde el equipo opcional instalado demasiado cerca del televisor puede distorsionar la imagen y/o producir ruido.

Montaje en pared

- ❒ La instalación en una pared requiere un soporte de montaje en pared. Cuando instale o quite el televisor y el soporte de montaje en pared, asegúrese de hacerlo con contratistas calificados. Si no se fija adecuadamente durante la instalación o desinstalación del soporte de montaje en pared, el televisor podría caerse y causar lesiones graves.

s de sécurité supplémentaires

Installation au mur

- ❒ L'installation au mur nécessite l'utilisation d'un support de fixation murale. Pour l'installation ou le démontage du téléviseur et du support de fixation murale, faites appel à un entrepreneur qualifié. Si le téléviseur est mal fixé pendant l'installation ou le retrait du support de fixation murale, il peut tomber et causer des blessures graves.
- ❒ Suivez bien le guide d'installation fourni avec le support de fixation murale lors de l'installation du téléviseur.
- ❒ Veillez à fixer les supports avec les pièces indiquées fournies avec le support de fixation murale.
- ❒ Ne suspendez pas le téléviseur au plafond. Il pourrait tomber et provoquer des blessures graves.
- ❒ N'accrochez aucun objet au téléviseur.
- ❒ Ne laissez pas les enfants monter sur le téléviseur.

CORDON D'ALIMENTATION CA

- ❒ Ne touchez pas le cordon d'alimentation CA ou la fiche avec des mains humides, ce qui pourrait provoquer l'électrocution.
- ❒ Pour débrancher le cordon d'alimentation CA, saisissez d'abord la fiche et débranchez-la de la prise murale. Ne tirez pas sur le cordon lui-même.
- ❒ Maintenez le cordon d'alimentation à l'abri des sources de chaleur.

Un téléviseur doté d'un cordon d'alimentation CA avec une fiche à trois broches avec mise à la terre doit être branché dans une prise de courant CA comportant une protection de mise à la terre.

- ❒ Ne modifiez pas et n'endommagez pas le cordon d'alimentation CA.
- ❒ Faites changer toute prise défectueuse par votre électricien afin de pouvoir y brancher votre téléviseur.

Le fait de soumettre le cordon d'alimentation à une usure prématurée et/ou à un mauvais traitement peut entraîner des dommages au cordon d'alimentation CA et au téléviseur.

- ❒ N'installez pas le téléviseur à un endroit où le cordon d'alimentation peut être facilement pincé, plié ou tordu, ou faire trébucher quelqu'un.

- ❒ Ne laissez rien reposer ou rouler sur le cordon.
- ❒ Pour votre sécurité, débranchez le cordon d'alimentation CA avant de brancher les câbles.
- ❒ Ne déplacez pas le téléviseur lorsque le cordon d'alimentation CA est branché, ni lorsque d'autres câbles (audio ou vidéo, par exemple) sont raccordés.
- ❒ Utilisez uniquement un cordon d'alimentation CA Sony d'origine pour votre téléviseur; aucune autre marque ne convient.
- ❒ N'utilisez pas le cordon d'alimentation CA fourni avec le téléviseur sur un autre appareil.
- ❒ N'utilisez jamais un cordon d'alimentation CA endommagé. Un cordon d'alimentation CA endommagé peut provoquer un court-circuit, ce qui peut causer un incendie ou l'électrocution.

Ne branchez pas votre téléviseur dans une prise de courant endommagée ou dans laquelle la fiche ne s'insère pas bien.

- ❒ Insérez la fiche complètement dans la prise. Un branchement lâche peut entraîner un arc électrique et un incendie.
- ❒ Ne surchargez pas la prise de courant CA.

Pour interrompre complètement l'alimentation électrique du téléviseur, débranchez le cordon d'alimentation CA de la prise de courant.

- ❒ Pendant les orages et lorsque vous n'utilisez pas le téléviseur pendant une longue période, débranchez le cordon d'alimentation CA de la prise de courant. Cette mesure vise à éviter des dommages potentiels à votre téléviseur. Débranchez également l'antenne pour éviter les dommages au téléviseur.

- ❒ Pour des raisons de sécurité et pour économiser l'électricité, exercez-vous à débrancher le cordon d'alimentation CA de la prise de courant CA.

Nettoyez la fiche du cordon d'alimentation CA

Débranchez la fiche du cordon d'alimentation CA et nettoyez-la de temps à autre pour éviter l'accumulation de poussière. Pendant le nettoyage, vérifiez que le cordon est en bon état. N'utilisez jamais un cordon d'alimentation CA endommagé.

ACCESSOIRES

Gardez les petits accessoires hors de la portée des enfants. N'utilisez que les accessoires indiqués par le fabricant avec ce téléviseur.

Réglage du volume

- ❒ Si vous utilisez des écouteurs, ne réglez pas le son à un volume excessif afin d'éviter d'endommager votre ouïe.

PILES

Les piles de la télécommande sont des produits consommables.

- ❒ Pour protéger l'environnement, mettez au rebut les piles usées conformément aux lois et règlements locaux.
- ❒ Ne jetez pas les piles au feu.
- ❒ Ne court-circuitez pas les piles, ne les démontez pas et ne les faites pas surchauffer.
- ❒ Remplacez-les uniquement par des piles identiques ou de type équivalent. L'utilisation de piles de rechange incorrectes peut provoquer une explosion.

ÉCRAN ACL

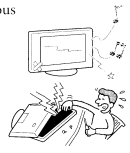
- ❒ Bien que l'écran ACL soit le fruit d'une technologie de haute précision et que 99,99 % ou plus de ses pixels soient efficaces, des points noirs ou des points lumineux (rouges, bleus ou verts) peuvent apparaître en permanence à l'écran ACL. Ceci est une propriété structurelle du panneau ACL et ne constitue pas un problème de fonctionnement.
- ❒ L'écran ACL de ce téléviseur a été conçu à partir de technologies de haute précision, et afin d'obtenir le meilleur rendement et la meilleure qualité d'image possible, le rétroéclairage du téléviseur est réglé pour en maximiser la luminosité. Toutefois, il est possible que vous observiez des zones moins claires que d'autres lorsque vous regardez un téléviseur ACL dans une pièce sombre alors que rien n'est affiché à l'écran. Il s'agit d'un phénomène normal et non d'un défaut de l'appareil. Le réglage des fonctions Mode image et Rétroéclairage, ou encore l'activation du Capteur de lumière ou de la fonction de gestion de l'alimentation vous permettent de régler l'écran afin d'améliorer cet aspect.
- ❒ Afin d'éviter d'endommager le panneau ACL, n'exposez pas l'écran ACL à la lumière directe du soleil.
- ❒ N'appuyez pas sur l'écran ACL, ne l'égratignez pas et ne placez pas d'objets sur le téléviseur. Cela pourrait provoquer l'instabilité de l'image ou des dommages au panneau ACL.
- ❒ Si le téléviseur est utilisé dans un environnement froid, l'image peut apparaître sale ou sombre. Ceci n'est pas le signe d'un problème de fonctionnement. Ce phénomène disparaît au fur et à mesure que la température augmente.
- ❒ Une image fantôme peut apparaître lorsque des images fixes sont affichées en continu. Elle devrait disparaître après quelques instants.
- ❒ L'écran ACL et le boîtier deviennent chauds lorsque le téléviseur est en cours d'utilisation. Il ne s'agit pas d'un problème de fonctionnement.
- ❒ Évitez de vaporiser sur l'écran ACL tout répulsif insecticide contenant des produits volatils.
- ❒ Évitez le contact prolongé de l'écran ACL avec le caoutchouc et les matériaux plastiques.

Écran endommagé

Ne jetez rien en direction de l'écran, car l'impact pourrait provoquer la fissuration, le bris ou l'éclatement du verre de l'écran ACL.

- ❒ Si le panneau ACL venait à être endommagé, des traces de cristaux liquides peuvent se retrouver entre deux épaisseurs de verre, parmi les morceaux de verre brisé.
- ❒ Ne touchez pas le verre brisé à mains nues. Comme dans toute situation de bris de verre, évitez le contact avec la peau et tenez les morceaux de verre à l'écart des yeux et de la bouche. Évitez le contact direct avec le liquide répandu et les morceaux de verre humides, car ces produits peuvent avoir un effet néfaste pour certaines personnes. En cas de contact, rincez la zone affectée abondamment à l'eau courante. Si des symptômes apparaissent, consultez votre médecin.
- ❒ Si la surface du téléviseur se fissure, ne touchez pas le téléviseur avant d'avoir débranché le cordon d'alimentation CA. Sinon, vous pourriez vous électrocuter.

RÉPARATION



N'utilisez pas le téléviseur si vous constatez ou croyez qu'il est endommagé.

- ❒ Ne tentez pas de réparer le téléviseur vous-même, car l'ouverture du boîtier pourrait vous exposer à des zones de tension élevée et à d'autres dangers. Pour toute réparation, adressez-vous à un technicien qualifié.
- ❒ Si des pièces doivent être remplacées, demandez au technicien de certifier par écrit que les pièces de rechange adéquates ont été utilisées et que leurs caractéristiques sont similaires ou identiques à celles des pièces d'origine. Toute substitution non autorisée pourrait causer un incendie, l'électrocution ou d'autres dangers.

Révision de sécurité

- ❒ Après toute réparation ou tout entretien du téléviseur, demandez au technicien d'effectuer une vérification de routine, telle que spécifiée par Sony, et de certifier que le téléviseur fonctionne en toute sécurité. Si le téléviseur ne peut pas être utilisé de façon sécuritaire, confiez sa mise au rebut à un technicien qualifié.

idad correctas e incorrectas adicionales

- ❒ Asegúrese de seguir la guía de instalación suministrada con el soporte de montaje en pared cuando instale el televisor.
- ❒ Asegúrese de fijar las abrazaderas con las piezas especificadas suministradas con el soporte de montaje en pared.
- ❒ No cuelgue el televisor del techo. Podría caerse y causar lesiones graves.
- ❒ No cuelgue ningún objeto en el televisor.
- ❒ No permita que los niños se suban al televisor.

CABLE DE ALIMENTACIÓN DE ca

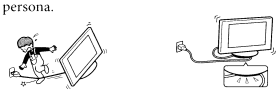
- ❒ No toque el cable de alimentación de ca ni el enchufe con las manos mojadas, ya que puede provocar una descarga eléctrica.
- ❒ Cuando vaya a desconectar el cable de alimentación de ca, jale del enchufe y desconéctelo del tomacorriente de pared primero. No jale del cable.
- ❒ Mantenga el cable de alimentación alejado de fuentes de calor.

Un televisor debe conectarse con un enchufe de cable de alimentación de ca de tres terminales y toma a tierra a un tomacorriente de ca con una conexión a tierra de protección.

- ❒ No modifique ni dañe el cable de alimentación de ca
- ❒ Póngase en contacto con su electricista para adaptar el tomacorriente a su televisor.

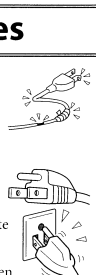
Si el cable de alimentación de ca queda expuesto a desgaste y/o maltrato, se puede dañar el cable de alimentación de ca y el televisor.

- ❒ No coloque el televisor donde el cable de alimentación se pueda apretar, doblar o torcer fácilmente, o donde pueda atrapar los pies de una persona.



- ❒ No permita que ningún objeto se encuentre o pase sobre el cable.
- ❒ Antes de conectar los cables, desenchufe el cable de alimentación de ca para su seguridad.
- ❒ No mueva el televisor con el cable de alimentación de ca, ni con otros cables de audio y video, conectados.
- ❒ No utilice cables de alimentación de ca que no sean originales de la marca Sony.
- ❒ No utilice el cable de alimentación de ca suministrado con el televisor con ningún otro aparato.
- ❒ Nunca utilice un cable de alimentación de ca dañado. Un cable de alimentación de ca dañado puede provocar un cortocircuito, lo que puede producir un incendio o una descarga eléctrica.

No utilice un tomacorriente de ca dañado o mal instalado como la fuente de alimentación del televisor.



- ❒ Inserte el enchufe en el tomacorriente hasta que quede bien metido. Si el enchufe no encaja completamente, pueden producirse chispas que acaben provocando un incendio.
- ❒ No sobrecargue el mismo tomacorriente de ca

Si se desenchufa el cable de alimentación de ca del tomacorriente de pared se corta el suministro eléctrico al televisor.

- ❒ Durante tormentas eléctricas o cuando no se utilice el televisor durante períodos de tiempo prolongados, se debe desenchufar el cable de alimentación de ca del tomacorriente de pared. Esto evitará la posibilidad de que se dañe su televisor. Desenchufe también la antena para evitar que se dañe el televisor.
- ❒ Para conservar energía y por motivos de seguridad, acostúmbrese a desenchufar el cable de alimentación de ca del tomacorriente de ca

Limpieza del enchufe del cable de alimentación de ca

Desenchufe el cable de alimentación de ca y límpielo de vez en cuando para evitar que se acumule el polvo. Durante la limpieza, compruebe la existencia de signos de daños. Nunca se debe utilizar un cable de alimentación de ca dañado.

ACCESORIOS

Mantenga los pequeños accesorios alejados del alcance de los niños. Utilice únicamente los accesorios especificados para este televisor.

Ajuste de volumen

- ❒ Cuando utilice audífonos, ajuste el volumen de forma que se eviten niveles excesivos de audio para no dañar los oídos.

PILAS

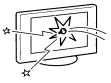
Las pilas del control remoto son consumibles.

- ❒ Para conservar el medio ambiente, siga las leyes o regulaciones locales para desechar las pilas usadas.
- ❒ No se deshaga de las pilas arrojándolas al fuego.
- ❒ No provoque un cortocircuito, desmonte ni recaliente las pilas.
- ❒ Reemplácelas sólo con el mismo tipo o uno equivalente. La utilización de pilas de repuesto incorrectas puede producir una explosión.

PANTALLA LCD (CRISTAL LÍQUIDO)

- ❒ La pantalla LCD está fabricada con tecnología de alta precisión y dispone de un mínimo de 99,99% de píxeles efectivos. En esta pantalla aparecen constantemente puntos negros o puntos luminosos en rojo, azul o verde. No se trata de una falla de funcionamiento, sino de una característica estructural del panel LCD.
- ❒ La pantalla de cristal líquido (LCD) está fabricada con tecnología de alta precisión y para alcanzar un alto nivel de rendimiento y de calidad de imagen, ésta configuración de retroiluminación se ajusta para maximizar el brillo del televisor. Sin embargo, es posible que se observe un brillo desigual cuando el televisor de pantalla de cristal líquido se ve en un ambiente oscuro sin una fuente de entrada o una pantalla en blanco. Esta condición es normal y no se trata de una falla de funcionamiento del televisor. Al cambiar el modo de Imagen, la configuración de Retroilumin, al habilitar el Detector de luz o al activar el Control de energía mejorará esta condición.
- ❒ Para evitar dañar el panel LCD, no exponga la pantalla LCD a la luz solar directa.
- ❒ No presione ni raye la pantalla LCD, ni coloque objetos sobre el televisor. Es posible que las imágenes resulten irregulares o que se dañe el panel LCD.
- ❒ Si se utiliza el televisor en un lugar frío, es posible que la imagen se oscurezca o que aparezca una mancha en la pantalla. No se trata de una falla de funcionamiento. Estos fenómenos desaparecerán a medida que aumente la temperatura.
- ❒ Si se ven imágenes fijas continuamente, puede que se produzca un efecto de imagen fantasma. Esto debería desaparecer transcurridos unos segundos.
- ❒ Cuando se utiliza el televisor, la pantalla LCD y la caja se calientan. No se trata de una falla de funcionamiento.
- ❒ No use repelentes insecticidas en aerosol con material volátil sobre la pantalla LCD.
- ❒ Evite el contacto prolongado de la pantalla LCD con material de goma o plástico.

Panel de pantalla roto



No arroje ningún objeto contra el televisor pues el impacto puede hacer que el cristal de la pantalla LCD se raje, se rompa o se disperse.

- ❒ Si se daña el panel LCD, es posible que se encuentren pequeños rastros de cristal líquido metidos entre el cristal en los fragmentos de cristal esparcidos.
- ❒ No toque el cristal roto con las manos. Como con cualquier trozo de cristal roto, evite el contacto con la piel, los ojos o la boca. Evite el contacto directo del cristal con líquidos o superficies húmedas pues éstos pueden tener un efecto perjudicial sobre algunas personas. Enjuague la zona de contacto con agua abundante. Si los síntomas persisten, acuda a un médico.
- ❒ Si la superficie del televisor se rompe, desenchufe el cable de alimentación de ca antes de tocar el televisor. De lo contrario, podría producirse una descarga eléctrica.

REPARACIÓN

No utilice el televisor si sospecha que está dañado o si el televisor está dañado.

- ❒ No intente reparar usted mismo el televisor, ya que al abrirlo se vería expuesto a voltajes peligrosos y otros riesgos. Solicite servicio técnico únicamente a personal calificado.
- ❒ Cuando sean necesarias piezas de repuesto, solicite al técnico de reparación que certifique por escrito haber utilizado piezas de repuesto adecuadas con las mismas características que las originales o con características similares. La utilización de piezas no autorizadas podría causar incendios, descargas eléctricas u otros peligros.

Comprobación de seguridad

- ❒ Después de haber finalizado cualquier servicio de mantenimiento o reparación del televisor, solicite al técnico de reparación que realice y certifique las comprobaciones de seguridad rutinarias según lo especificado por Sony para determinar si el televisor se encuentra en condiciones seguras de operación. Solicite a un técnico de reparación calificado que se deshaga del televisor si no se encuentra en condiciones seguras de operación.

4-103-056-**02**(1)
4103056021

SONY®

LCD Television

LIMITED WARRANTY (US ONLY)

SONY ELECTRONICS INC. ("SONY") warrants this product against defects in material or workmanship for the time periods and as set forth below. Pursuant to this Limited Warranty, SONY will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. In the event of a defect, these are your exclusive remedies.

Term: For a period of one (1) year from the original date of purchase of the product (or a period of ninety (90) days for commercial use), SONY will, at its option, repair or replace with new or refurbished product or parts, any product or parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: In-home diagnostic warranty service is provided during the one (1) year limited warranty term (ninety (90) days for commercial use) for thirty (30) inch (measured diagonally) or larger screen size television products through a SONY-authorized service facility. Otherwise, to obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the SONY authorized service facility specified. A dated purchase receipt or bill of sale is required. For specific instructions on how to obtain warranty service for your product,

Visit SONY's Web Site:
www.sony.com/support

Or call the Sony Customer Information Service Center

1-800-222-SONY (7669)

For an accessory or part not available from your authorized dealer, call:

1-800-488-SONY (7669)

Repair / Replacement Warranty: This Limited Warranty shall apply to any repair, replacement part or replacement product for the remainder of the original Limited Warranty period or for ninety (90) days, whichever is longer. Any parts or product replaced under this Limited Warranty will become the property of SONY.

This Limited Warranty only covers product issues caused by defects in material or workmanship during ordinary consumer use; it does not cover product issues caused by any other reason, including but not limited to, product issues due to (i) acts of God, (ii) misuse, (iii) customer instruction, installation, set up adjustments or signal reception issues; (iv) limitations of technology, or (v) modification of or to any part of the SONY product, include the antenna. This Limited Warranty does not cover SONY products sold AS IS or WITH ALL FAULTS or consumables (such as fuses or batteries). This Limited Warranty is invalid if the factory-applied serial number has been altered or removed from the product. This Limited Warranty is valid only in the United States.

LIMITATION ON DAMAGES: SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

DURATION OF IMPLIED WARRANTIES: EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights and you may have other rights which vary from state to state.

Printed in U.S.A.